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**TUGGING AT THE HEARTSTRINGS? EXAMINING DISCRETE
EMOTION IN NONPROFIT TWITTER MESSAGES AND ITS
EFFECT ON PASS ALONG BEHAVIOR**

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Dedication

With all my love, I dedicate this dissertation to my parents, who cultivated a love of learning, and to my sisters, my children, and especially my husband who supported me every step of the way.

Tugging at the Heartstrings? Examining Discrete Emotion in Nonprofit Twitter Messages and Its Effect on Pass Along Behavior

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The rise of social media has provided organizations with new tools for interacting with customers and building relationships and have created an ideal place to foster and nurture emotional connections. Nonprofit organizations now strongly rely on the sharing of their social media messages to deliver important information, build community, and mobilize supporters (Lovejoy & Saxton, 2012). However, research regarding the extent to which nonprofits use emotions in social media communications is quite limited.

The inclusion of emotional content is important in message virality, however, only very limited research exists on the types of emotional content that is included in nonprofit Twitter messages. Therefore, relevant data and descriptive frameworks are essential to helping us understand how nonprofit organizations are using microblogging sites to engage with their target audiences. This research takes a first step in this regard to investigate the effect that emotion can have on pass along behavior. Using Social Sharing of Emotion (Rime Finkenauer, Luminet, Zech, and Philippot, 1998, Rime 2009) as the theoretical foundation, this dissertation specifically examines nonprofit usage of discrete emotion and its effect on pass along behavior.

This research found that nonprofits are using emotional content in their Twitter messages to communicate with their public. Specifically, nonprofits are using the focal eight discrete emotions as follows: Trust (33.3%), anticipation (30.4), joy (27.9%), fear (17.2), surprise (13.8%), sadness (13.6%), anger (12.2%), and disgust (7.1%). Additionally, results indicate that using emotive content in nonprofit Twitter messages can influence pass along behavior. Specifically, results indicate that nonprofit messages that utilized fear, sadness, surprise, or trust positively influenced pass along behavior. In contrast, use of anticipation-related words had a negative impact of pass along behavior, and thus while it is currently the second most utilized emotion it should be used cautiously. Therefore, nonprofits can now better employ emotive content to extend the reach of the messages to see their messages spread further.

Table of Contents

List of Tables	x
List of Figures	xii
Chapter 1: Introduction	1
Chapter 2: Social Media, Twitter, and Viral Marketing	5
Twitter	5
Twitter Message Characteristics and Pass Along Behavior	9
Number of Followers and Number Following:	9
Number of Characters	10
User mentions & User replies	10
Hashtags	11
Videos, Photos, and URLs	11
Non-Profit Usage of Social Media	11
Factors Influencing Sharing Behavior	13
Outcome Expectations	13
Benefits to Self: Emotional Regulation	14
Benefits to Self: Impression Management	15
Anticipatory Socialization: Social Bonding	16
Benefits to Others: Hedonic Value (Entertainment)	17
Benefits to Others: Instrumental Value (Informational)	17
Other Factors Influencing Sharing Behavior: Audience Characteristics & Sharing Environment	18
Audience Characteristics	18
Sharing Environment	20
Viral Marketing	21
Chapter 3: Emotion and Sharing on Social Media	24
Emotion	24
Dimensional Perspective: Valence-Arousal-Dominance	25

Valence	26
Arousal	29
Dominance	30
Categorical Perspective: Discrete Emotions	31
Social Sharing of Emotion	36
Motivations for Social Sharing of Emotion	39
From Pass Along to Viral: Propagation of social sharing of emotion in a social network	40
Chapter 4: Nonprofit Usage of Emotion and its Effect on Pass Along Behavior.	43
Discrete Emotion	45
Surprise	46
Anticipation.....	48
Joy	49
Sadness.....	50
Anger.....	52
Fear	53
Trust	56
Disgust	60
Research Questions	61
Chapter 5: Methods	62
Sample Selection.....	62
Emotion Lexicon Selection.....	62
NRC-Emotion Lexicon	63
Data Collection	65
Data Preparation.....	66
Tweet Type Annotation	66
Sector Annotation	67
Emotion Annotation.....	67
Data Analysis	68
Inclusion of Discrete Emotions in Nonprofit Twitter Messages	68

Effect of Discrete Emotions on Pass Along Behavior	68
Chapter 6: Results	71
Nonprofit Organization and Message Characteristics	71
Nonprofit Emotional Inclusion in Twitter Messages (RQ1).....	76
Surprise	78
Anticipation.....	80
Joy	82
Sadness.....	84
Anger.....	86
Fear	87
Trust	89
Disgust	91
Effect of Emotion on Pass Along Behavior (RQ2).....	92
Count of Tweet Retweets.....	92
Count of Tweet Likes.....	94
Chapter 7: General Discussion.....	96
Contributions and Implications.....	102
Limitations and Future Research	103
Conclusion	104
Appendices.....	105
Appendix A: Nonprofit Organization Twitter Characteristics.....	105
Appendix B: Nonprofit Tweet Type by Organization	108
Appendix C: Nonprofit Organization Message Characteristics.....	112
References.....	115

List of Tables

Table 1: Outcome Expectations for Socially Sharing Emotional Content	14
Table 2: Plutchik's Range of Emotional Intensities for Primary Emotions.....	35
Table 3: Plutchik's (1980) Emotion Combinations	36
Table 4: Motivations for Socially Sharing an Emotion (Rime, 2007).....	39
Table 5: Number of Words in the NRC-Emotion Lexicon Associated with Each Primary Emotion	63
Table 6: Examples from the NRC-Emotion Lexicon of Words Associated with Each Primary Emotion	64
Table 7: Model Variables and Operationalization	69
Table 8: Nonprofit Twitter Characteristics by Sector	71
Table 9: Nonprofit Tweet Type by Sector	73
Table 10: Nonprofit Twitter Message Characteristics by Sector.....	74
Table 11: Top 10 Most Retweeted Nonprofit Twitter Messages.....	75
Table 12: Top 10 Most Retweeted Nonprofit Twitter Messages.....	76
Table 13: Percentage of Tweets Including Each Discrete Emotion by Type of Tweet	77
Table 14: Percentage of Tweets Including Each Discrete Emotion by Sector	78
Table 15: Percentage of Tweets Including Combination of Two Discrete Emotions	78
Table 16: Example Nonprofit Tweets Utilizing Surprise	80
Table 17: Example Nonprofit Tweets Utilizing Anticipation.....	82
Table 18: Example Nonprofit Tweets Utilizing Joy	84
Table 19: Example Nonprofit Tweets Utilizing Sadness.....	85

Table 20: Example Nonprofit Tweets Utilizing Anger.....	87
Table 21: Example Nonprofit Tweets Utilizing Fear	89
Table 22: Example Nonprofit Tweets Utilizing Trust	90
Table 23: Example Nonprofit Tweets Utilizing Disgust	92
Table 23: Fixed Coefficients for Negative Binomial Mixed Model of Retweet Counts	93
Table 24: Fixed Coefficients for Negative Binomial Mixed Model of Likes Counts	94

List of Figures

Figure 1: Plutchik’s (1980) Wheel of Emotions	34
Figure 2: Word Cloud of Nonprofit Tweets Associated with Surprise	79
Figure 3: Word Cloud of Nonprofit Tweets Associated with Anticipation.....	81
Figure 4: Word Cloud Nonprofit Tweets Associated with Joy.....	83
Figure 5: Word Cloud of Nonprofit Tweets Associated with Sadness	85
Figure 6: Word Cloud Nonprofit Tweets Associated with Anger	86
Figure 7: Word Cloud Nonprofit Tweets Associated with Fear	88
Figure 8: Word Cloud Nonprofit Tweets Associated with Trust.....	90
Figure 9: Word Cloud Nonprofit Tweets Associated with Disgust.....	91

Chapter 1: Introduction

In the United States and many other countries around the world, there is an abundance of choices of nonprofit organizations to which an individual can choose to give their limited resources (financial donations, volunteer time, etc.). Often the deciding factor underlying choice is the emotional connection or relationship the individual feels with the nonprofit brand. The rise of social media has provided organizations with new tools for interacting with customers and building relationships and have created an ideal place to foster and nurture emotional connections. Nonprofit organizations now strongly rely on the sharing of their social media messages to deliver important information, build community, and mobilize supporters (Lovejoy & Saxton, 2012). Building a network of supporters is essential to the long-term success of the organization and social media has greatly enhanced nonprofit organizations' ability to create and nurture this supporter network. Interpersonal relationship research indicates that relationships are often strengthened by sharing emotions by entertaining and connecting them. For nonprofits, building relationships making emotional connections is key for creating lifetime supporters who give both money and time.

Social media allows the opportunity for researchers to observe in real-time the relationship between the organizations' messaging and the reactions of the public. Emotions play an important role in attitude formation regarding advertisements and messages (Edell and Burke, 1987; Royo-Vela, 2005) and individuals primed with emotions are more likely to donate money and/or time (Batson et al, 1997). Electronic word-of-mouth and viral marketing literature suggests that the manner in which a message is crafted can influence pass along behavior and messages containing emotion are more likely to be forwarded. However, only very limited research exists on the types of emotional content

that is included in nonprofit Twitter messages and no known research to date investigates the effect of emotion on pass-along rates for nonprofit social media messages. Understanding the relationship between emotional inclusion in nonprofit social media messages and pass along behavior could better position nonprofit organizations to spread information, build communities, and mobilize supporters. Social media networks now provide an opportunity for nonprofits to use emotional expressions in their social media messages to both nurture a desired brand image and build a community of supporters through the collection of shared emotional experiences. Therefore, this research takes a first step in this regard and will investigate the effect that the inclusion of emotional content in nonprofit Twitter messages has on pass along behavior in the form of retweeting the message.

Furthermore, the inclusion of emotional content is important in message virality. Prior literature on pass-along behavior shows that messages containing emotion are more likely to be forwarded; however, analysis of the emotional content of nonprofit Tweets has not fully been investigated. The expression of certain types of emotion in Twitter messages may lead to more attention or physiological arousal, which could result in higher levels of pass along behavior (Berger & Milkman, 2012). Are nonprofit organizations including emotion in their Twitter messages? Further, the inclusion of which types of emotions has the most influence on pass along behavior? The answers to these questions could better position nonprofit organizations to spread information, build communities, and mobilize supporters. While Electronic Word-of-Mouth Marketing (eWOMM) and viral marketing literature suggests the manner in which a message is crafted can influence pass along behavior, only very limited research exists on the types of emotional content that is included in nonprofit Twitter messages. Therefore, relevant data and descriptive frameworks are essential to helping us understand how nonprofit organizations are using

microblogging sites to engage with their target audiences. This research takes a first step in this regard to investigate the effect that emotion can have on pass along behavior.

Using Social Sharing of Emotion (Rime Finkenauer, Luminet, Zech, and Philippot, 1998; Rime 2009) as the theoretical foundation, this dissertation specifically examines nonprofit usage of emotion and its effect on pass along behavior. While much of prior nonprofit social media research has investigated the intended message function, (Lovejoy, Water, Saxton, 2012; Waters & Jamal, 2011; Guo & Saxton, 2014), the inclusion of emotional content and its effect on pass along rates has not yet been addressed in nonprofit research. This research also fills a gap in knowledge concerning the effect that the inclusion of specific discrete emotions has on pass-along behavior of nonprofit messages. Lastly, while a larger amount of research exists on factors that are associated with retweeting from an individual level, less is known regarding tweets that originate from organizations. This is of particular interest in that while organizations are not in control regarding how their messages are shared, they do have control regarding the content of the message.

The rest of the manuscript is organized as follows. Chapter 2 investigates Twitter and the characteristics of Twitter that may influence pass along behavior. We then review existing nonprofit social media research. We also review literature concerning some of the factors that likely influence pass along rates of nonprofit social media messages and will end the chapter by discussing the concept of viral marketing. Chapter 3 reviews emotion generally, including a review of the approaches to the study of emotion, and then will investigate the role of emotion in motivating sharing behavior. Next, Chapter 4 reviews literature examining the effect that emotional inclusion likely has on pass along rates, first utilizing a dimensional perspective and then focusing specifically on eight discrete emotions, namely joy, sadness, fear, anger, disgust, anticipation, surprise, and trust. Research questions will be presented. Chapter 5 presents an explication of methods and

results are presented in Chapter 6. Finally, Chapter 7 contains a general discussion including contributions, limitations, and a conclusion.

Chapter 2: Social Media, Twitter, and Viral Marketing

Microblogging is becoming an increasingly important part of communication strategies of many non-profit organizations so much so that nonprofits now strongly rely on the sharing of their social media messages to deliver important information, build community, and mobilize supporters (Lovejoy & Saxton, 2012). “Twitter and Facebook in particular have garnered attention from nonprofit organizations as innovative communication tools that both supplement and supplant the traditional website” (Nah and Saxton, 2013, pg. 295; Nonprofit Technology Network, 2012). Building a network of supporters is essential to the long-term success of the organization and social media has greatly enhanced nonprofit organizations’ ability to create and nurture this supporter network. These social media applications have created new ways for nonprofit organizations to communicate with the public, resulting in increases in general awareness, reaching existing networks of clients and supporters, expanding their network of supporters and building online communities. Social media is now become deeply incorporated into a firm's integrated marketing communication plan.

TWITTER

Since its inception in October 2006, Twitter has grown in popularity and is now a hugely popular microblogging service on the Internet. Twitter, now boasting 320 million active users in more than 35 languages (Twitter, n.d.), is a social network service (SNS) where users can elect to follow other users to receive their mini-blogs, called “tweets”. Twitter’s unique “retweeting” feature, allows users to pass along information to their “followers”, who can then choose to retweet the message to their “followers” and so on. For marketers, this represents an ideal environment for viral marketing campaigns, which can increase the reach of the message dramatically. Given the context of this research is Twitter, attention will now briefly turn to Twitter characteristics that can influence pass along behavior.

In Twitter, messages, or “tweets”, are limited to 140 characters and are delivered primarily in a one-to-many format. The frequency with which a nonprofit organization tweets is an important consideration in order to remain “in the mix” without overloading the feeds of its followers. The average number of tweets sent out by nonprofits vary in previous research. Guo & Saxton (2014) report an average of 3.5 tweets per day by nonprofit advocacy organizations while Lovejoy, Waters, and Saxton (2012) reported average of 2.3 per day. Waters & Jamal (2011) found an average of 28.63 in a month, or less than one a day.

If one user would like to see the tweets of another user, that user can choose to “follow” the organization. Therefore, every Twitter user has a list of other Twitter users who are “following” them, as indicated by the number of “followers” on their profile page, as well as a list of whom they are “following”. Unlike, Facebook, mutual consent is not required. An individual is able to follow another user at any time and receive tweets in their own timeline, or feed of miniblog postings, of those whom they are following. Therefore, large networks or communities are able to form quickly.

The number of “followers” of a nonprofit organization is an indication of the initial audience and the size of the initial reach of the organization’s Twitter message. Given that the Twitter environment allows for rapid dissemination of information as well as community building and mobilization of supporters, the number of users that the organization is followed by is particularly important in the delivery of the nonprofit’s social media communications strategy.

Various social media strategies exist in nonprofit organizations regarding decisions on who to follow. Prior research indicates that some choose to follow anyone who it believes will help them advance their mission while others only follow those who are directly affiliated with the organization, with a large variation (spanning from 3 to 46,723) of the number of users that nonprofit organizations were following (Lovejoy, Waters, & Saxton, 2012).

Twitter offers a variety of tools and features that can help facilitate engagement with the content, which could stimulate relationship building and pass along behavior, including “liking”,

retweeting (RT), public messages (PM), hashtags, and hyperlinks. “Liking” a tweet is a way to show appreciation or gratitude for the tweet. Tweets that a user has “liked” are viewable on that user’s profile page. Users can also choose to pass along the tweet to those who are following them by using the RT function. Retweeting occurs when a user reposts a tweet from another user. “RT” will be added to the beginning of the message to indicate that it is a retweet and can contain information about the original sender through inclusion of a public message (PM) described later. Organizations often request that followers retweet the message so that it can be shared with a larger audience. Retweeting can be perceived as pass along behavior and as an acknowledgement that the content is valuable. The proportion of retweets in nonprofit Twitter messages has been shown to fall between 16% and 28%; (16.2% - Lovejoy, Waters, and Saxton, 2012), (17.5% Waters & Jamal, 2011), (22.4% - Guo & Saxton, 2014 for nonprofit advocacy), (28% - Hughes & Palen, 2009 for natural emergencies). However, considerable range has also been reported with some organization not using the feature and others sending out 50 retweets in a month (Lovejoy Waters, and Saxton, 2012).

A public message (PM) is created when the sender identifies a target user by including the “@” symbol followed by the individual’s username within the 140-character tweet. This initiates a connection or a dialogue between two parties. There are two forms of public messages, namely “mentions” and “replies”. A “mention” is used when an individual includes the “@” symbol and username anywhere in the tweet. Usage of a mention may simply be a way for users to publicly mention each other, and therefore, may not require a response. For example, a “mention” is often used by organizations as a way to publicly acknowledge or thank its supporters. Gao & Saxton (2014) found that 51.17% of tweets contained a user mention, and the nonprofit advocacy organizations sent out an average of 53.37 tweets with user mentions in a month.

Individuals can also respond to a (PM), which is called a “reply”, which will add the “@” symbol and username to the beginning of the tweet. A reply will show up in the intended recipient's timeline. Third party users will only see the reply in their timeline if they are following both the

sender and the recipient. Past research has analyzed all Twitter messages that begin with the @ symbol together and found the following percentages: 6.35% (Gao & Saxton, 2014; nonprofit advocacy organizations), 12% (Java, Finin, Song and Tseng, 2007; individuals), 16% (Lovejoy, Waters, and Saxton, 2012; large nonprofits), and 22% (Hughes and Palen, 2009; individuals). Gao & Saxton (2014) found that on average nonprofit advocacy organizations were sending out public messages about once every 5 days, with an average of 6.55 per month. For organizations, sending a PM may be used to initiate a conversation with an individual. Usage of a PM by supporters can increase the awareness of the organization and its Twitter presence while also publicly associating the individual with the organization, which influences their social identity.

Twitter also offers the ability to send private messages that are not viewable by the general public, called “direct messages”, however, attention in most research is focused on public messages (PM) given access restrictions of direct messages and the widespread popularity and usage of public messages.

Another feature offered by Twitter is the usage of a hashtag and it is employed by using the pound sign, “#”, followed by additional letters, numbers or words. Historically, a hashtag was utilized to indicate the message’s relevance to a particular topic. This has the effect of indexing the message, which facilitates the identification of messages containing the hashtag that are relevant to a particular topic. Hashtags can be formally created, as often is done by organizations, or can arise more organically through user interactions. While usage of hashtags in this manner is still prominent, it has also evolved as an outlet for the inclusion of emotional, subtextual or other nonverbal information. The percentage of tweets sent out by nonprofits that contain at least one hashtag has been reported in prior research between 21.9% and 60.5% (21.9% - Waters & Jamal, 2011; 30% Lovejoy, Waters, and Saxton, 2012; 60.5% - Gao & Saxton, 2014).

Twitter also allows the usage of hyperlinks, photos, and videos within the content of the tweet and given the character restriction, usage of these often can help maximize the amount of information

contained within the tweet. Shortened URLs, provided by companies such as bit.ly, are widely used to adhere to the character restriction, conserving space for more pertinent information. Hyperlinks have been reported to be contained in 68% of large nonprofit organizations tweets (Lovejoy, Waters, and Saxton, 2012) and in 73.4% of nonprofit advocacy organizations (Guo & Saxton, 2014). This is considerably higher than individual usage of hyperlinks, which has been reported between 13% and 25% (Java, Song, Finin, and Tseng, 2007; Hughes & Palen, 2009).

TWITTER MESSAGE CHARACTERISTICS AND PASS ALONG BEHAVIOR

Nonprofit research that specifically analyzes message characteristics that lead to higher engagement levels is limited. While investigating nonprofit usage of hashtags (also described later), Saxton, Niyirora, Guo, and Waters,(2015) found that number of followers, total number of tweets, and time on Twitter were significant organization-level controls and the number of URLs, number of user mentions (negative), number of characters, number of hashtags, usage of a common cross-sector hashtag, photo inclusion, and video link inclusion were significant message characteristics that were associated with higher pass along behavior (as measured by the number to retweets). When incorporating hashtag type variables into a regression model, all of the organizational characteristics remained significant, but only the number of user mentions (negative), the number of characters, usage of a common cross-sector hashtag, and photo inclusion remained significant.

Number of Followers and Number Following:

The number of followers that the organization has is an indication of the potential initial reach of the message. It is logical to reason that the more people that are exposed to the message, the higher the likelihood that the message will be propagated (Petrovic, Osborne, and Lavrenko, 2011; Suh et al, 2010). The number of followers also indicates that the followers have elected to follow the organization because they have found it to be of value. Therefore, that organization's content may be more likely to be passed on if the information is also believed to be of value to the follower's network. This relationship has been verified in prior research (Jenders, Kasneci, and

Naumann, 2013). In addition, the number of users that the organization is following could be perceived as an indication of the extent to which the organization is interested in interacting.

Number of Characters

It is logical to assume the more characters are used, the more information is present, the more likely it is to be informative or affective, thus prompting the message to be retweeted. However, given that when retweeted, “RT” is added to the beginning of the tweet, and often people like to add their own commentary or user mentions to a tweet prior to retweeting, this is likely only to occur up to a certain number of characters. Jenders, Kasneci, and Naumann (2013) found that for tweets up to 120 characters, retweets grew proportionally with character count. However, this relationship was reversed for messages that contained more than 120 characters.

User mentions & User replies

Because usage of user mentions and user replies illustrates a conversation or at least a link between two parties, it is possible that they are negatively associated with the mass diffusion of the message overall. Nonprofit research has shown that the relationship between user mentions and retweet rate to be negative when including the number of user mentions as a control variable (Saxton et al., 2015). Brand marketing literature found significantly lower levels of retweets for messages containing user replies than for messages contain original brand content (Araujo, Neijens, and Vliegenthart, 2015). Given that usage of the user mentions and replies also reduces the total number of available characters, and usage of user mentions initiates a conversation between the parties, user mentions may have a negative impact overall on pass along behavior. However, usage of a small number of user mentions has been associated positively with retweetability, but a large number of mentions are associated with smaller retweets. Jenders, Kasneci, and Naumann (2013) found a positive relationship between one and six mentions, but a negative for zero or seven or more mentions.

Hashtags

Hashtags are included in messages so that they create a topic for the message so that it can be categorized and more easily found by others (Boyd, Golder, and Lotan, 2010, Suh, Hong, Pirolli, Chi, 2010). Hashtags are also used to add subtextual or affective information to the message. Therefore, hashtags add additional information that may be more interesting to others which may lead them to be more likely to be shared. Research has found that the inclusion of hashtags is a predictor of pass-along behavior (Suh et al., 2010). However, because hashtags usage reduces the total number of available characters for the main message, there is likely a limit to the value of adding additional hashtags. Indeed, Jenders et al. (2013) found that tweets that contain between one and three hashtags are more likely to be retweeted than messages containing other numbers of hashtags.

Videos, Photos, and URLs

Because messages that include elements other than just text appeal to multiple perceptual systems, the inclusion of a photo or video will increase the media richness (Lakkaraju, McAuley, Leskovec, 2013) of the message, which will increase the likelihood that it is effective and is shared (Fortin & Dholakia, 2005). Additionally, the inclusion of a link has been identified as a predictor of spreading information (Petrovic et al., 2011; Suh et al, 2010; Araujo et al., 2015).

NON-PROFIT USAGE OF SOCIAL MEDIA

Non-profit organizations are increasingly utilizing social media as part of their communications plan. Facebook and Twitter are still the most popular among nonprofits with organizations posting to Facebook an average of 1.3 times per day and to Twitter an average of 3.8 times per day, although engagement with social media posts appears to vary by sector (Nonprofit Technology Network, 2016).

While research on nonprofit usage of social media is growing, much has centered on the intended message function. When investigating the content of the tweets, many nonprofit social media researchers have adopted the typology developed by Lovejoy and Saxton (2012), which

identified twelve tweet functions across three broad categories, namely Information, Community, and Action. Tweets categorized as Information are those whose single purpose is to inform and includes information on the organization and its activities and items of general interest to the audience. Community consists of messages with the intention of building relationships and communities of supporters and includes the categories of giving recognition or thanks, acknowledgement of current and local events, responses to PMs, and response solicitation. Action, as the name implies, include tweets that are intended to solicit an action from the reader, including promoting an event, appealing for donations, selling a product, calling for volunteers and employees, lobbying and advocating, joining another site or vote for the organization, or learning to how to help. While still relatively new to research, other fields are starting to utilize Lovejoy and Saxton's (2012) typology. For example, health communication researchers have also adapted the Information - Community - Action typology for research on state (Thackery, Neiger, Burton, and Thackeray, 2013) and local (Neiger, Thackeray, Burton, Thackeray, and Reese, 2013) health departments' Twitter communications.

Past research has reported that more than half of nonprofit Twitter communications are serving primarily an informative function. The Information function represented 58.6% in Lovejoy and Saxton (2012), while Gao & Saxton (2014) reported it being as high as 68.7% for Civil Rights and Advocacy organizations' Twitter communications. Community is typically the second highest function and has also been reported with a large variation, from about 20% to almost 45% (SvenssonMahoney, and Hambrick, 2015; Gao & Saxton, 2014; Lovejoy & Saxton, 2012). Finally, tweets falling into the Action function represent the smallest category, with between 4% and 15% of Twitter messages requesting an action.

The pass along rates associated with the intended message functions have just begun to be investigated. Using organizational characteristics (# Facebook fans, age, size, and industry) as controls, Saxton & Waters (2014) adopted the Lovejoy and Saxton (2012) "Information,

Community, Action” typology to investigate engagement (# likes, # comments, and # shares) with nonprofit Facebook messages. Significant differences were reported for the various engagement measures. Of particular interest, a higher number of comments were associated with community-building messages, while messages containing informational content were more likely to be shared.

Much research, including the study which developed the Information, Community Action typology (Lovejoy & Saxton, 2012) has found that while organizations are using Twitter for engaging in dialog and community building, nonprofit organizations are primarily using Twitter for informative purposes and may be missing an opportunity to engage in deeper conversation and community building with their publics (Guo & Saxton, 2014, Lovejoy et al., 2012; Waters et al., 2011).

FACTORS INFLUENCING SHARING BEHAVIOR

Outcome Expectations

When deciding whether to engage in a behavior, individuals consider both the benefits and the costs associated with engaging in the behavior (Rogers, 1975, Rosenstock, 1974). This is not surprising and has been supported by several theoretical models including, social cognitive theory, the Health Belief Model, Theory of Normative Social Behavior, and Theory of Reasoned Action to name a few (Bandura, 1986, Janz & Becker, 1984; Rimal & Real, 2003; Ajzen & Fishbein, 1980). Outcome expectations are beliefs that that an individual is more likely to engage in a behavior if he/she anticipates that positive results will be obtained in the form of benefits to the individual directly, in the form of increased socialization, and/or in the form of benefits to others and these benefits outweigh the costs of engaging in the behavior.

Outcome expectations can be divided into benefits to self, anticipatory socialization, and benefits to others, which would include both benefits to the receiver of the forwarded message and to the nonprofit organization. Benefit to self includes impression management, emotional regulation, and information acquisition. Anticipatory socialization refers to anticipatory social bonding that may

result from sharing the message. Lastly, benefits to the receiver include information and entertainment while benefits to the organization include awareness and support. This framework is shown in Table 1. We will now turn our attention to investigate these outcome expectations of socially sharing emotion.

Outcome Expectations		
Benefits to Self	Impression Management	Self-Enhancement
		Identity Signalling
		Filling Conversation Space
	Emotional Regulation	Help & Support
		Comfort & Consolidation
		Venting
		Clarification & Meaning
		Rehearsal
Anticipatory Socialization	Social Bonding	Reinforcing Shared Views
		Reducing Loneliness
Benefits to Others	Receiver:	
		Information Value
		Advice
	Organization:	Resolve Problems
		Inform & Warn
		Entertain
	Awareness & Support	Awareness
		Support

Table 1: Outcome Expectations for Socially Sharing Emotional Content

Benefits to Self: Emotional Regulation

A key reason for socially sharing emotions is that it allows for emotional regulation by managing emotions through social interaction (Zaki and Williams, 2013). Emotions can be dampened, intensified, or maintained through the emotional regulation process (Gross & Thompson,

2007). A majority of the motives for social sharing identified by Rime (2007) can be attributed to emotional regulation. The first basic function includes rehearsing, reminding, and re-experiencing. For positive emotions, recalling an emotional experience reactivates positive emotions, providing the opportunity to relive the positive experience, and can boost feelings of self-esteem and self-efficacy (Rime 2007; Zech, Rime and Nils, 2004). For negative emotions, rehearsal can fulfill certain needs regarding the memory of the event. Sharing emotion, through communal coping (Dunahoo, Hobfoll, Monnier, Hulsizer, and Johnson, 1998) often results in meeting socioaffective regulation needs including getting help and support, comfort and consolidation, venting, arousing empathy, legitimization and validation, clarification and meaning, and rehearsal (Rime, 2007). Additionally, social sharing of the emotion can encourage cognitive articulation including clarification and sense-making, which may also lead to the provision of support, comfort, and approval. Additionally, it can offer an opportunity to express oneself or vent, all leading to decreases in stress and anxiety associated with the negative emotional experience. Additionally, individuals may engage in helping the organization, not solely out of pure altruistic reasons, but rather to repair a negative mood state that was incited by the organization (Cialdini, Schaller, Houlihan, Arps, Fultz, and Beaman, 1987).

WOM research indicates that angry and dissatisfied consumers share WOM to vent (Wetzer, Zeelenberg, and Pieters, 2007; Anderson, 1998). Additionally, after people share a negative emotional experience on Facebook, well-being was improved due to an increase in perceived social support (Buechel & Berger, 2012). Additionally, brands that are associated with higher risk receive more WOM (Lovett, Peres, and Shachar, 2013) to receive advice, approval, or increased confidence (Engel, Blackwell, and Miniard 1993, Hennig-Thurau & Walsh, 2004).

Benefits to Self: Impression Management

Rime (2009) suggests that desires to impress others, distinguish oneself, elicit interest, and manage impressions are motives of socially sharing emotions, which he included in his “getting attention” category. Impression management concerns likely influence sharing decisions and this

may be particularly true on social networking sites. Berger (2014) argues that impression management concerns are driven by three motives including self-enhancement, identity-signaling, and filling a void in the conversation space. WOM research indicates that decisions regarding what is shared is influenced by desires to communicate particular social identities and avoid undesirable connections (Belk, 1988; Berger & Heath, 2007; Escalas & Bettman, 2003; Kleine, Klein, & Kernan, 1993; Levy, 1959). For sharing to occur, the sender must approve of a connection between the content and himself/herself being visibly displayed to his/her social network. What is shared is a reflection on the individual in terms of whom they are or how they want to be perceived. Prior WOM research indicates that information is more likely to be shared regarding products or brands that we are proud to be associated with and that fit the desired social image that we would like to project (Sundaram, Mitra, and Webster, 1998; Chung and Darke, 2006).

Anticipatory Socialization: Social Bonding

Another need that social sharing of emotion satisfies is stimulating bonding and strengthening ties. People have a basic need to connect and interact with others (Baumeister & Leary, 1995), which interpersonal communication satisfies (Hennig-Thurau Gwinner, Walsh, and Gremler, 2004). Research suggests that high arousal emotions may increase social bonding needs (Chen & Berger, 2013) and sharing also bonds or connects people together (Peters & Kashina, 2007). People participate in brand communities to connect with similar others (Muniz & O'Guinn, 2001) and people prefer talking about shared interest topics to increase social connection (Clark & Kashima, 2007). Recent research (Sas, Dix, Hart, and Su, 2009) suggests that sharing memorable experiences on Facebook is associated with both emotional regulation benefits, such as re-experiencing a positive event and also interpersonal benefits, such as strengthening relationships and connecting with others. Further, feedback left on the individual's wall was further able to legitimize and validate the event.

Benefits to Others: Hedonic Value (Entertainment)

Viral marketing is much more likely to work if the sender anticipates that the message will be of some value to others in their network. As such, content that is anticipated to have information or entertainment value is more likely to be shared. Rime (2007) suggests that entertaining or amusing others is a motive for why individuals socially share emotions. Indeed, viral marketing literature suggests that entertaining content is more likely to be shared. Various research supports the claim that more interesting products get more attention (Berger & Schwartz, 2011, Berger & Iyengar, 2013) and more interesting or surprising news articles are more likely to be forwarded via email (Berger & Milkman, 2012). This may also be because doing so reflects favorably on the sharer, as he/she is perceived as more interesting, funny, surprising, etc. Entertainment goals may also encourage exaggeration (Burrus, Kruger, and Jurgens, 2006) to make the content seem more interesting.

Benefits to Others: Instrumental Value (Informational)

Rime (2007) suggests that obtaining advice, receiving guidance, knowing about another person's view, and finding solutions are also motives to socially sharing emotions, which he includes in a category called "advice and solutions". Consumers often talk to others to confirm their own purchase decision and reduce feelings of doubt (Dichter, 1966; Engel, Blackwell, and Miniard, 1993; Rosnow, 1980). They also use WOM to get suggestions or recommendations and to obtain an outside perspective (Fitzsimons & Lehmann, 2004; Tost, Gino & Larrick, 2012; Zhao & Zie, 2011). Consumers also report sharing information to help others (Dichter, 1966; Sundaram, Mitra, and Webster, 1998) to provide advice or guidance or to offer suggestions. Additionally, in Rime's (2007) "informing and warning" category, he includes motives regarding bringing one's experience and preventing others from making the same mistake. Consistent with this, dissatisfied or angry consumers are more likely to share negative word of mouth (Anderson, 1998; Wetzer, Zeelenberg, and Pieters, 2007). It is clear that content that has some informational value is more likely to be shared. Useful marketing messages (Chiu, Chiou, Fang, Lin and Wu, 2007) are more likely to be

shared. Additionally, useful news-related stories, such as restaurant reviews, are also more likely to be on the New York Times most emailed list (Berger & Milkman, 2012). Lastly, research suggests that satisfied consumers share positive WOM at least in part as a way of thanking a company or because they want the company to be successful (Hennig-Thurau et al 2004; Sundaram et al, 1998).

Other Factors Influencing Sharing Behavior: Audience Characteristics & Sharing Environment

Audience Characteristics

The nature of the audience can also influence sharing behavior. First, social norms of the audience likely influence sharing behavior. Descriptive norms represent what an individual thinks most people actually do (Cialdini et al., 1990). Perceptions regarding the commonality of the behavior have been shown to influence an individual's behavior. Additionally, injunctive norms represent what an individual perceives others think he/she should or should not do (Cialdini et al., 1990) and is reinforced through peer approval and social sanctions associated with the behavior (Rimal and Real, 2003). In some social networks normative rules may dictate that sharing more personally emotional updates is more appropriate on a private message than a status update, while in others social sharing in a public forum may be quite common. Rules of acceptable sharing behavior may vary between groups, but may guide behavior.

Additionally, research has shown that identification with the group can serve to reinforce or discourage certain behaviors. Specifically, the more an individual feels connected to the group, the more likely it is that the accepted group norms can influence the individual's behaviors. Rooted in social identity theory (Tajfel, 1981), group identity refers to the degree of affiliation an individual feels to a group. When the group identity is salient (Hogg & Reid, 2006), the individual is motivated to engage in normative behavior because he/she believes that the group will find the behavior acceptable if he/she complies with group norms.

A related concept, namely tie strength, also influences sharing decisions (Berger, 2014). Word of mouth with weak ties tends to be more positive (Dubois, Bonezzi, De Angelis, 2013). Additionally, impression management concerns influence sharing with weak ties because the single interaction will have a greater influence on how weaker ties perceive the individual. However, people also impression-manage with strong ties (Baumeister, 1982; Tesser & Campbell, 1982; Tesser & Paulhus, 1983). People may also be more inclined to share emotional experiences with strong ties (Brown & Reingen, 1987; Rime 2009) and be more inclined to ask for advice from strong ties (McPherson, Smith-Lovin & Cook, 2001).

Group identity is typically conceptualized in two ways: Aspiration and Similarity (Rimal & Real, 2005). Social cognitive theory suggests that we are influenced by those whom we aspire to become (Bandura, 1977). Additionally, we are also influenced by the behaviors of similar others. Additionally, we will experience positive emotions when we conform to the behaviors of in-group members (Christensen, Rothberger, Wood, & Matz, 2004). Therefore, tie status (Berger, 2014) may also influence sharing behavior. Individuals may be more inclined to share more positive information with those who are higher in social status (Du Plessis & Dubois, 2013) or may try harder to bond with higher status individuals.

Behavioral norms emanating from one's close social referents are more instrumental in determining behavior than those from a more diffused social group (Campo et al, 2003). Therefore, audience salience also likely influences behavior (Berger, 2014). Additionally, the diversity or homogeneity of the audience may also impact sharing decisions. For example, a more diverse audience may result in shying away from controversial topics and lead to sharing a more balanced opinion (Fleming, Darley, Hilton & Kojetin, 1990), after consideration of the anticipated multiple viewpoints (Schlosser, 2005).

Research also suggests that audience size may also influence sharing decisions (Berger, 2014). An individual's decision to share may depend on whether they are talking one-one-one with

another individual, or to a small group, or to a large audience. Impression management concerns may be heightened when sharing with larger sized audiences (Barasch & Berger, 2014). Increased expression of both positive and negative emotion on Twitter has been associated with both larger and sparser social networks (Kivran-Swaine, & Naaman, 2011). Additionally, people with a larger ratio of followers to followees on Twitter tend to share emotions that are more positive and fewer negative emotions than people with a lower ratio (De Choudhury, Gamon, and Counts, 2012). SNSs may offer an easy way to share with a large number of people simultaneously compared to more private channels, thereby reducing the need for repeated interactions (Sosik and Bazarova, 2014; Tong and Walther, 2011).

Sharing Environment

Specific features of the environment within which the sharing may occur may also influence sharing propensity. To begin with, Berger (2014) identifies the communication method (i.e. written or oral) may influence sharing behavior. Additionally, the extent to which an individual is anonymous or identifiable may also influence sharing behavior (Berger, 2014).

Additionally, content typically encountered on a particular sharing platform, for example, may be more likely to be forwarded because it is more accessible. Additionally, the environment within which the emotional stimulus was presented may encourage individuals to use that same environment for sharing. For example, individuals may share an experience by forwarding an email via email or retweet a message via Twitter out of convenience.

Additionally, specific differences in the sharing platforms may influence sharing decisions. For example, character or pictorial limitations or advantages that are specific to each individual sharing platform may also influence sharing behavior. People may use face-to-face environments to share more significant emotional events, and choose to use a particular SNS, such as Facebook for “everyday habitual communication” (Choi and Toma, 2014, pg. 539).

Additionally, audience reaction options vary online vs offline, and between SNSs as well. The manner in which individuals can reply may be particularly “important network visible SNSs where people seek attention and validation (Bazarova and Choi, 2014) and replies can signal attention, co-presence, and partaking in the shared emotional experience (Sosik & Bazarova, 2014)” (Bazarova, Choi, Sosik, Cosley, and Whitlock, 2015, pg. 156).

VIRAL MARKETING

Viral marketing is a relatively new area of research. Understanding why messages are shared and what components of a message will make it more likely to be spread virally is not yet fully understood. Viral marketing has been defined as “unpaid peer-to-peer communication of provocative content originating from an identified sponsor using the Internet to persuade or influence an audience to pass along content to others” (Porter and Golan, 2006, 29). Kaplan and Haenlein, (2011, pg. 253) define it as “electronic word-of-mouth whereby some form of marketing message related to a company, brand, or product is transmitted in an exponentially growing way - often through the use of social media applications”. Other authors refer to it as the creation of contagious messages that is spread from peer to peer, which results in an increase in brand awareness (Kiss & Bichler, 2008; Kirby and Marsden, 2006).

However, unlike traditional forms of marketing, viral marketing messages spread at unprecedented speed, is not bound geographically, and can reach consumers globally very quickly. Furthermore, viral marketing is not considered spam, but rather welcome communication between the brand and the users of the brand, and then between family or friends (Woerndl, Papagiannidis, Bourlakis, and Li, 2008). This is also true within Twitter, where individuals choose to “follow” other users and receive their miniblog posts. Viral marketing works by transforming consumers into unpaid agents who forward the message to others in their network (Miller & Lammas, 2010), which makes transmission rapid and cheap (Laudon & Traver, 2001). Essentially, it provides an

organization an opportunity to spread their messages quickly and exponentially at minimal cost (Cruz & Fill, 2008, Wilson, 2005).

Additionally, prior research has found that the choice of whom to pass along a viral message to initially is of paramount importance because the resulting viral network that is created depends upon the initial seeds (Helm, 2000). Connected individuals in a network often have similar interests, and therefore, there is a higher probability that once an initial seed perceives the marketing content as interesting and is motivated to share it that others in that network will also have a similar response (Porter & Golan, 2006). The act of sharing illustrates a link between the shared content, the user sharing it, and the community with which it is shared. For viral marketing to work, the sender must perceive sharing the message to be of some value to themselves or others in their network and the sender must approve of the connection between the content and himself/herself. WOM research illustrates that information is more likely to be shared regarding products or brands that we feel our community would find useful and of products or brands that we are proud to be associated with that fit our desired social image that we would like to project (Sundaram, Mitra, and Webster, 1998; Chung and Darke, 2006).

However, there is still a limited understanding of how viral marketing works (Dobele, Lindgreen, Beverland, Vanhamme, and van Wijk, 2007). Increasingly, researchers believe that the greatest contributing factor as to why content goes viral is the emotional connection readers have with the content (Berger & Milkman, 2011, Dobele et al, 2007; Eckler & Bolls, 2011; Nelson-Field, Riebe, and Newstead, 2011). However, theoretical frameworks for word of mouth communication, and in particular the role that emotion plays in sharing content, are still quite limited. Drawing from a theory from social psychology, namely the Social Sharing of Emotion (Christophe & Rime, 1997; Rime 2009; Rime Paez, Kanyangara & Yzerbyt, 2011) and applying the theory to pass along behavior (and by extension to viral marketing), this research aims to offer marketers a possible explanation regarding the factors involved in sharing decisions.

In this chapter, we have reviewed Twitter and the message characteristics of this social media platform that influence pass along behavior. Specifically, the number of followers, number of characters, use of user mentions and user replies, use of hashtags, and use of video, photo, and URLs were all identified as impacting pass along behavior. Next, prior nonprofit social media research was reviewed. Then, other individual-level factors that influence sharing decisions were reviewed including emotional regulation, impression management, social bonding needs, and the anticipated hedonic and instrumental value to others. Additionally, audience and sharing environment characteristics that influence sharing behavior were reviewed and then relevant viral marketing literature was presented. The next chapter provides a literature review on the streams of affect and emotion, and how they pertain to social media and pass along behavior.

Chapter 3: Emotion and Sharing on Social Media

Humans have a strong and very fundamental “need to belong”. Inherent in our nature is a need to affiliate and form bonds with others, particularly after emotional eliciting situations (Baumeister and Leary, 1995; Rime 2009). People derive intrinsic value from sharing emotions and personal information with others (Rime, 2007, Rime 2009; Tamir and Mitchell, 2012). By sharing their experiences, individuals are able to alter their subjective perception of the event in a positive manner improving their emotional well-being. Recent research suggests that doing so improves subjective feelings and activates the reward centers of the brain (Wagner et al, 2014). Thus, it follows that reactions to emotional marketing-related content would also likely be shared. Researchers believe underpinning the success of most viral marketing campaigns is a strong emotional reaction to the content. Dobel et al (2007) first suggested that emotion plays a pivotal role in viral marketing, while the first empirical test was conducted by Berger and Milkman (2011) by investigating the effect of emotion in the spread of news articles. Therefore, the general concept of emotion will be reviewed and then a theoretical foundation for the social sharing of emotion will be provided.

EMOTION

Emotion has been defined as “mental states of readiness that arise from appraisals of events or one’s own thoughts (Bagozzi, Gapinath, and Nyer, 1999). These internal mental states are evaluative reactions to situations or objects and vary in intensity (Ortony, Clore, and Colling, 1988). Essentially, emotions serve to organize perceptions and garner action to attain specific goals (Plutchik, 1980). Emotions are generally seen as being comprised of five components: 1) cognitive appraisal or evaluation 2) physiological component of arousal 3) motor expression 4) a motivational component, including behavioral intentions and readiness and 5) a subjective feeling state (see Scherer, 1984; Plutchik, 1980, Fiske and Taylor, 1991). They are generally seen as having adaptive functions, are based on events that are personally relevant, have specific action tendencies, and are

motivators of behavior (Plutchik, 1980; Roseman, 1984; Lazarus, 1991; Izard 1977; Frijda 1986, 1988; Ortony, Clore, and Collins, 1988).

Given that both emotions and moods both fall under the general category of affect, it is important to distinguish the two (Lord and Kanfer, 2002). Mood is generally defined as a nonspecific, valenced feeling that is typically low in arousal. Additionally, mood is seen as longer lasting compared to emotion. In contrast, emotions tend to be briefer and context specific, have a known source with associated resulting action tendencies, and is generally more intense (Ekman, 1992, Frijda 1993; Lerner and Keltner, 2000). While both are relevant to discussions of eWOM, the focus of this research is on emotion because emotion is context specific and can be more directly influenced by nonprofit social media communication.

Research in emotional psychology and affective sciences typically study emotion utilizing one of two theoretical approaches, either a dimensional approach or categorical approach. Dimensional models characterize emotions based on a set of underlying mechanisms, or dimensions, such as valence and arousal, that are associated with the experience of emotion. In contrast, categorical models treat emotions as a system of discrete emotional categories (Frijda, 1987, Plutchik, 1980, Lazarus, 2001), such as fear, joy, disgust, etc. We will now briefly review each approach.

Dimensional Perspective: Valence-Arousal-Dominance

Dimensional models posit that all emotions can be shown to vary along a limited number of fundamental dimensions (Mano, 1991; Watson and Tellegen, 1985). These dimensional approaches suggest that an emotional state is comprised of the integration of each of the dimensions, each of which is necessary for a clear description of the emotion (Russell and Mehrabian, 1977). While there is no consistent agreement regarding the optimal number or naming of these underlying dimensions, two or three have consistently emerged. Specifically, emotions are said to be comprised of the positive or negative responses (or pleasure, valence), the physiological arousal (or activation,

activity) and dominance (or power, control). Dimensional perspectives do not measure actual emotion per se, but rather the pleasure, arousal and dominance (for example) that results from exposure to a stimulus and is therefore typically utilized when emotional states rather than specific emotions are of interest. Well-known dimensional models include Mehrabian and Russell's (1974) Pleasure-Arousal-Dominance scale and Russell's (1980) circumplex model of affect. Generally speaking, two-dimensional models that include dimensions that measure valence and arousal tend to be fairly stable within and across cultures (Russell et al, 1991). However, a third dimension, dominance, has been identified as being useful in distinguishing emotions, particularly in social situations (Bradley and Lang, 1994) and has been shown to explain an additional 10-15% of the variance. Therefore, these three dimensions will now briefly be reviewed.

Valence

The valence dimension is conceptualized as a continuous measure of the degree to which one's feeling state is perceived as pleasurable ranging from pleasant (positive) to unpleasant (negative). Adjectives such as happy/unhappy, pleased/annoyed, and satisfied/unsatisfied have been used to provide indications on one's pleasure level. Negative emotions result in a "temporary destabilization of the person, a generalized distressing condition that a person is highly motivated to reduce" (Rime, 2009, pg. 64). As such, negative emotions stimulate cognitive work and social interaction, making sharing more likely. For very different reasons, positive emotions also encourage sharing behavior. Specifically, when experiencing positive emotions, individuals are motivated to mentally ruminate on these experiences. Sharing positive emotions allows the individual to cherish or capitalize on these positive experiences to extend their effects. Social psychology research indicates that neither the proportion nor extent of sharing was affected by the valence (Rime, 2009).

Valence represents the intrinsic attractiveness or aversiveness of events or objects. Alternatively, it has been used to characterize emotional experiences as being either positive or negative. Lastly, it has been used to describe emotional experiences by direction or the motivational

state of readiness to move toward or away from the stimuli (Cacioppo, Gardner, and Berntson, 1997; Lang, 2006). Generally, valence has primarily been conceptualized in a bipolar manner with the extremes stemming from the same single underlying motivational system (Russel and Barrett, 1999).

Previous research indicates that nonprofit organizations often incite negative emotions in the public in order to activate giving intentions (Basil, Ridgway, & Basil, 2008; Dillard & Peck, 2000). Further, intentions to help an organization can be increased by inciting negative emotions and offering the possibility of positive emotions through engagement (Marchand and Filiatrault, 2002). Utilizing negative emotions in this way can be effective, at least in part, because of what Cialdini, Schaller, Houlihan, Arps, Fultz, and Beaman (1987) refer to as negative state relief. This means that individuals may engage in helping the organization, not solely out of pure altruistic reasons, but rather to repair a negative mood state that was incited by the organization.

Word-of-Mouth (WOM) research has found that the inclusion of both positive and negative emotion are associated with sharing behavior (e.g. Nyer, 1997; Westbrook, 1987; White and Yu, 2005). However, research is conflicting regarding whether positive or negative emotions are more highly associated with pass along rates. Some research indicates that negative content is more influential for virality (Godes et al, 2005). However, other research indicates that information diffusion is most associated with positive messages (Berger and Milkman, 2012) and that pleasant emotional tones have the strongest effect on attitude formation and forwarding intentions for videos (Eckler and Bolls, 2011). Research investigating emotional content of Twitter messages indicates that positive tweets are retweeted more often than negative tweets (Gruzd, Doiron, and Mai, 2010); while Kim & Yoo (2012) found that the inclusion of positive emotions had a negative effect on retweet behavior. However, sharing of positive content may also be more likely to occur on social media, given the association between self-identity representation and the shared content (Berger & Milkman, 2012).

The division may be influenced by the discipline, with most marketing researchers positing that positive content is spread more quickly while most computer systems researchers believing that negative content drives sharing, particularly related to diffusion of news content (Hansen, Arvidsson, Nielsen, Colleoni, and Etter, 2011). Berger (2014) suggests that an important moderator may be whether the topic being discussed reflects on the sender and whether people are talking about themselves or others (Kamins, Folkes, & Perner, 1997; De Angelis, Bonezzi, Peluso, Rucker & Constabile, 2012). However, research indicates that people are liked less after posting negative content (Forest and Wood, 2012) and people prefer interacting with positive others (Bell 1978; Folkes & Sears, 1977; Kamins, Folkes, and Perner, 1997), so impression management concerns may make sharing positive content more likely, particularly on social networks sites. Additionally, research indicates that people generally feel happier after sharing positive versus negative emotions (Choi and Toma, 2014), suggesting that people may be more likely to share content expressing positive emotions.

More recently, others have begun to suggest that valence may be better conceptualized in a bivariate rather than bipolar way (i.e. Cacioppo & Berntson, 1994; A. Lang, 2000). The bivariate approach posits that underlying the experience of emotion is two potentially independent motivational systems (Cacioppo & Berntson, 1994, Cacioppo and Gardner, 1999), one being an approach or appetitive system and the other an avoidance or aversive system. It is conceptually possible that underlying anger, for example, is a coactive state with both aversive and appetitive activation (Lee and Lang, 2009). Research in eWOM is just beginning to investigate variance in a bivariate way. Early experimental research indicates that intention to forward viral video ads was strongest with ads containing pleasant emotional tone, followed by coactive (both), followed by unpleasant (Eckler & Bolls, 2011). However, it is unclear whether this relationship would also hold with nonprofit or health communication where the communication of threats may have more

influence on attitudes and behavior. Future research should investigate the effect of bivariate variance on sharing intentions of nonprofit social media messages.

Arousal

The second dimension, arousal, is conceived to measure one's feeling state of activation, both mental and physical (Mehrabian, 1996), where high arousal indicates a high state of activity or activation while low arousal indicates a state of deactivation or relaxation and with adjectives such as stimulated/relaxed, excited/calm, and wide awake/sleepy originally used to describe it. Research is quite limited regarding the arousal level of nonprofit communication. Because the goal of much nonprofit communication is to incite action in its recipients, arousal levels within marketing communications may be rather high. However, arousal level utilized may depend on whether the intended message function is to inform, to nurture community development, or to solicit an action from its supporters (Lovejoy & Saxton, 2012). Given that the majority of nonprofit tweets contain an informative message function (Svensson et al, 2015; Gao & Saxton, 2014; Lovejoy & Saxton, 2012), it may be likely that lower arousal levels are typically utilized on messages on social media.

The activation or arousal level is more clearly associated with pass along behavior than was the case for valence. Certain emotions elicit a high level of physiological arousal, which then are more likely to elicit a mobilization response when compared to more relaxing low arousal evoking emotions. Research suggests that high arousal emotions may increase social bonding needs (Chen & Berger, 2013). News articles that elicit high arousal emotions (i.e. awe, anger, anxiety) are more likely to be shared than those that elicit low arousal emotions (i.e. sadness) (Berger & Milkman, 2012).

Other research indicates that ads that elicit more arousal as measured through skin conductance receive more WOM (Siefert, Kothuri, Jacobs, Levine, Plummer, and Marci, 2009). Messages that evoke low-arousal emotions, such as sadness, tend to be less viral, while those that evoke high-arousal emotions, such as awe and amusement (positive) or anger and anxiety (negative)

may be more likely to be shared (Berger, 2011; Berger and Milkman, 2012). As such, most research agrees that higher arousal emotions are generally expected to be associated with a higher sharing propensity (Berger & Milkman, 2011; Berger, 2011; Nelson-Field, Riebe, and Newstead, 2011).

Dominance

In addition to valance and arousal, many dimensional approaches also include a third dimension, namely dominance, which generally accounts for an additional 10-15% of the variance in emotional responses (Osgood, 1952, Mehrabian and Russell, 1974). Dominance was conceived to represent one's feelings of control or the degree to which one feels restricted in his/her behavior due to either physical or social barriers, and ranges from submissiveness to dominance. While most marketing research has focused on the valence and arousal dimensions, (Frijda, 1986; Mandler 1984; Ortony et al 1988) most has ignored dominance (Russell, 1980; Russell et al, 1981; Chebat and Michon, 2003; Mattila and Wirtz 2006; Kuppens, 2008).

Dominance is associated with the interactive relationship between the emotion-provoking event or context and the individual where high dominance would indicate that the individual has maximum control of the situation (Bradley and Lang, 1994). Research indicate that dominance may be important in distinguishing anger from other negative emotions. Anger is typically higher in terms of dominance than fear or sadness, for example (Mehrabian and Russell, 1974). However, valance and dominance tend to be at least somewhat correlated, with more pleasant emotions eliciting more dominance feelings than more negative emotions.

Nonprofit organizations' usage of social media may be driven at least in part by its potential to mobilize and empower their target audiences to further their cause. It is likely that the sense of control or dominance that the receiver feels after receiving the message impacts an organization's success in this regard. However, with respect to the intended message function of nonprofit social media messages, dominance levels may be higher and more prominent in messages with an intended message function of action solicitation, as opposed to delivering information or building community.

It seems reasonable that the dominance expressed within the message can influence one's perceived sense of control, which could affect whether the individual forwards the message. This largely ignored third dimension may help further explain why some content is forwarded while others are not, and therefore, dominance likely influences sharing. Specifically, one's own perceived sense of control likely impacts his/her believed ability to influence the future and help nonprofits by passing along nonprofit social media messages. When investigating the virality of news articles, Guerini and Staiano's (2015) results suggest that dominance was more important in broadcasting (sharing an article on social networks) than it was for narrowcasting (uploading comments to the article page) while arousal appeared to be more important in narrowcasting than in broadcasting. Given that sharing nonprofit Twitter messages is a form of broadcasting, dominance should fill an important role in retweet rates. As such, it is anticipated that the feeling of being in control will be associated with higher pass along rates. While not a focal part of this research, future research should investigate the role that dominance plays in pass along behavior of nonprofit social media messages.

Categorical Perspective: Discrete Emotions

The dimensional view of emotion is increasingly under fire (Smith and Ellsworth, 1985). The main argument against a dimensional approach is that the two most utilized dimensions of valence and arousal are unable to distinguish between emotions that differ only slightly across these two dimensions, like anger and anxiety for example (Fontain, Scherer, Roesch, and Ellsworth, 2007), but the two emotions have distinct phenomenology and induce different behaviors (Russell and Barrett, 1999; Yin, Bond, and Zhang, 2014). Ultimately, the two or three most utilized dimensions are seen by some as insufficient to describe and differentiate the complexities of the emotional experience. While dimensional models have long been used by marketing researchers to analyze emotional responses to marketing stimuli (for example, Laroche, Teng, Michon, and Chebat, 2005;

Ha and Lennon, 2010; Lin 2010; Penz and Hogg, 2011), work on emotion in recent years has focused on identifying and understanding discrete emotions.

The discrete approach categorizes emotion into one of several groups, such as fear, joy, disgust, etc. Emotion researchers utilizing the discrete approach have put effort into establishing the universal existence of the categories and defining the evaluations or appraisals that proceed each emotion (Ekman, Friesen and Ellsworth, 1972; Izard 1971; Levenson, Ekman, Heider, and Friesen, 1992). However, there has been some debate over the years regarding the development and recognition of emotions in individuals and the role of cognition in the process. The James-Lange theory suggests that emotions arise because of the physiological changes (James, 1884), while the Cannon-Bard Theory suggests that emotion and physiological changes occur simultaneously (Cannon, 1927). Later, Schachter and Singer (1962) suggested that emotion is influenced by both physiological arousal and the cognitive interpretation of the arousal. However, today cognitive appraisal theory is the most commonly accepted theory of emotions. It differs from other prior theories in that it posits that cognitive appraisals or evaluations are necessary for emotion to occur. Specifically, the way events and situations are appraised directly influences the resulting emotional experience and differences in appraisals can result in differing emotional responses (Lazarus, 1991; Frijda, 1986; Roseman, 1984). These appraisals can be either conscious and deliberate or unconscious and automatic. While appraisal theories vary, many include common factors such as motivation (goal relevance and congruence), social relationships (accountability, legitimacy, ego involvement, social norms), and controllability (certainty and coping potential) (Roseman and Smith, 2001).

According to cognitive appraisal theory, the emotion process begins when an individual perceives an object or event and appraises it for its relevance to his/her personal wellbeing. Specific patterns of appraisal lead to physiological changes and results in certain states of action readiness. This results in the subjective emotional experience. Finally, the physiological changes and action

tendencies together influence perception, cognition, and ultimately behavioral intentions in accordance with the goal established by the specific emotion's action tendencies. Finally, the individual chooses how to react (Lazarus, 1991; Frijda, 1986; Roseman, 1984). Because each discrete emotion is associated with a specific set of appraisals, perceptions, cognitions, and behaviors, it is essential to examine how the entire suite of responses for each emotion together may influences behavior.

Although there are many theories of emotion, some make an extinction between basic emotions and non-basic emotions, although this is a contentious debate. While some believe this distinction is not necessary (Ortony and Turner, 1990), many others argue that basic emotions are quite distinct from non-basic in that they serve as the foundation for other non-basic (or secondary or complex) emotions (Ekman, 1992; Izard, 1991; Plutchik, 1980). A description of Plutchik's Wheel of Emotions (1980), which distinguishes between basic and complex emotions is detailed later in this chapter, but essentially basic emotions are generally defined as being innate or hard wired and are universally experienced by all human beings, evolving as a function of adaptation and survival. They are also believed to develop early in an individual's life in response to situational demands, have similar facial expressions across cultures, and occur more frequently (Ekman, 1994; Ben-Ze'ev, 2000). Additionally, limited cognitive involvement is believed to be needed in coping and they are seen as relatively cognitively independent (Izard, Ackerman, Schultz, 1999).

In contrast, non-basic emotions (or complex, or secondary, or self-conscious emotions) are exclusively associated with humans (Leary, 2004), are believed to develop after basic emotions (Lewis, 2011), and require a higher level of cognitive ability (Tangney and Daring, 2002). In order to maintain a positive self-representation, individuals need to take their thoughts, intentions, memories, and internal feeling states into account in order to modify their behavior to conform to social norms (Tracy and Robins, 2007; Leary and Buttermore, 2003; Bagozzi, 2006). Therefore, non-basic emotions are seen as cognitively dependent (Izard et al, 1999; Leary and Buttermore, 2003).

With complex emotions, individuals compare themselves to their own ideal standards (Higgins et al, 1987) and to their perceptions of social standards and any discrepancy generates non-basic emotions. If an individual perceives himself/herself to be in line with standards or exceed standards, positive emotions, like pride result. If he/she finds him/herself below the socially accepted standards, negative emotions such as shame may result (Tracy and Robins, 2004; Bagozzi, 2006).

While various emotion classification systems exist, many identify similar sets of discrete emotions, such as joy, fear, anger, sadness, and disgust. For example, Lazarus (1991) identifies a large set of emotions, which includes happiness, sadness, anger, fright, disgust, anxiety, guilt, shame, envy, jealousy, pride, relief, hope, love, gratitude, and compassion. Ekman's work (1992) focuses on six emotions, five of which are included in Lazarus's set. Ekman's set includes joy, sadness, anger, fear, disgust, and surprise. Another influential and widespread emotion classification approach is Robert Plutchik's (1980) Wheel of Emotions (shown in Figure 1), which, like Ekman, places emphasis on the role that the emotions play in an evolutionary context to enhance an organism's chance of survival (Plutchik 1980, 2001). His classification system contains the aforementioned six emotions that are contained in Ekman's work but also includes anticipation and trust.

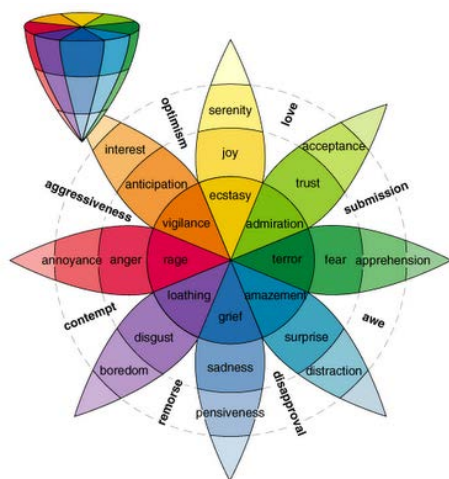


Figure 1: Plutchik's (1980) Wheel of Emotions

Each of the eight emotions can vary in intensity ranging from light to extreme. These emotional intensities are shown in Table 2 and illustrated in Figure 1.

Primary Emotion	Low Intensity	High Intensity
Trust	Acceptance	Admiration
Fear	Apprehension	Terror
Surprise	Distraction	Amazement
Sadness	Pensiveness	Grief
Disgust	Boredom	Loathing
Anger	Annoyance	Rage
Anticipation	Interest	Vigilance
Joy	Serenity	Ecstasy

Table 2: Plutchik's Range of Emotional Intensities for Primary Emotions

These eight emotions are believed to be evolutionarily rooted as follows: Trust leads to tribal sharing and collaboration; Fear causes flight from danger; Surprise leads to pausing to appraise and learn; Sadness enables letting go of attachments; Disgust warns of poisonous items; Anger leads to fighting competitors or predators; Anticipation leads to preparation; Joy results in seeking good things again (Plutchik, 1980).

Plutchik (1980) views basic emotions as being like a color wheel and argues that that the combination of two or three basic emotions generates other non-basic or complex emotions. Primary dyads are created by combining adjacent emotions. For example, joy and trust combine to create love. Secondary dyads are obtained by combining emotions that are two axes distant, such as sadness + fear = despair. Tertiary dyads are created by combining emotions that are three axes distant, such

as joy + surprise = delight. Emotion combinations including Plutchik's Primary, Secondary, and Tertiary dyads are shown in Table 3.

Dyad Type	Basic Emotion	+	Basic Emotion	=	New Non-Basic Emotion
Primary	Joy	+	Trust	=	Love
	Trust	+	Fear	=	Submission
	Fear	+	Surprise	=	Alarm
	Surprise	+	Sadness	=	Disappointment
	Sadness	+	Disgust	=	Remorse
	Disgust	+	Anger	=	Contempt
	Anger	+	Anticipation	=	Aggression
	Anticipation	+	Joy	=	Optimism
Secondary	Joy	+	Fear	=	Guilt
	Trust	+	Surprise	=	Curiosity
	Fear	+	Sadness	=	Despair
	Sadness	+	Anger	=	Envy
	Disgust	+	Anticipation	=	Cynism
	Anger	+	Joy	=	Pride
	Anticipation	+	Trust	=	Fatalism
Tertiary	Joy	+	Surprise	=	Delight
	Trust	+	Sadness	=	Sentimentality
	Fear	+	Disgust	=	Shame
	Surprise	+	Anger	=	Outrage
	Sadness	+	Anticipation	=	Pessimism
	Disgust	+	Joy	=	Morbidness
	Anger	+	Trust	=	Dominance
	Anticipation	+	Fear	=	Anxiety

Table 3: Plutchik's (1980) Emotion Combinations

SOCIAL SHARING OF EMOTION

Past research has shown that emotions are a big reason why viral marketing messages are shared (Chakrabarti and Berthon, 2012; Teixeira, Carraca, Markland, Silva, and Ryan, 2012; Phelps et al, 2004). Libert and Tynski (2013) investigated the inclusion of emotions content in viral

marketing videos and found that elicitation of strong emotions, regardless of their valence, was associated with a higher probability of message sharing. Therefore, it is possible that the inclusion of any emotion can cause a marketing message to go viral if it is experienced at a high enough intensity, although differences in sharing behavior are expected. However, in order to understand why exposure to emotional content might stimulate social interaction and the sharing of the message, a theory from social psychology, namely the Social Sharing of Emotion, will be reviewed.

Social Sharing of Emotion (Rime Finkenauer, Luminet, Zech, and Philippot, 1998, Rime 2009) describes the phenomenon where after an emotion-eliciting event, individuals will initiate interpersonal behaviors where discussing the event and their reactions to it is a focal part of the interaction (Rime 1998). Two distinct characteristics that have been defined of the phenomenon require it to be (1) expressed in a socially shared language (2) with an addressee, even if only at a symbolic level (Rime 1998, Rime, Mesquita, Boca, and Philippot, 1991). Social sharing of emotion occurs when an individual communicates with one or more persons about the circumstances of an emotion-eliciting event about their feelings and emotional reactions. A key motivation for social sharing of emotion is the management of emotions through social interaction. This results because of the complex nature of the emotions and both positive and negative emotional experiences elicit these social interactions. While guilt and shame tend to be shared to a lesser degree (Finkenauer & Rime, 1998), both positive and negative emotions tend to be shared.

Positive emotions result when a goal is accelerated or achieved sooner than anticipated (Carver & Scheier, 1990, 2001). Individuals should be motivated to express positive emotions because doing so should reactivate the associated positive feelings and memories so that they may be re-experienced. Because people are motivated to mentally ruminate on positive emotional experiences, socially sharing of positive emotions allows the individual to “savor” (Bryant, 1989) or “capitalize” (Langton, 1994) on them. Rime (2007, pg. 468) outlines three ways in which positive

emotions can be capitalized on, namely by: 1) making it more memorable to the self, 2) seeking social contacts and letting other know about the event, and 3) maximizing the event's significance.

Additionally, higher relationship well-being results when the listener responds enthusiastically to the capitalization (Gable, Reis, Impett, and Asher 2004). Therefore, not only does sharing enhance positive affect, it also results in stronger social bonds (Rime, 2009). Consequently, when individuals experience a positive emotional experience, they are motivated to share this experience with others.

In contrast, negative emotions result from circumstances that interfere with goal-reaching activities (Carver & Scheier, 1990, 2001). Negative emotional experiences result in a “temporary destabilization of the person, a generalized distressing condition that a person is highly motivated to reduce” (Rime, 2009, p). When something interferes with goal attainment, previously held assumptions, schemas, implicit theories and models, etc. have been disconfirmed, and cognitive dissonance results, which fuels cognitive work and the production of meaning (Kruglanski, 1996; Martin and Tesser, 1989, Weick, 1995, Rime, 2009). Additionally, because of their complex nature, negative emotions also stimulate social comparison, narration, and conversation (Rime, 2009). As motives for narration arise when expectations are violated, it is anticipated that individuals would also use narration for negative emotional events to classify and organize the experience and by concretizing the experience into a script so that it can more easily understood (Rime, 1998). Through conversations, individuals can also create socially acceptable ways of defining the experience (Rime, 1998). Negative emotions also stimulate individuals to search for emotional support through contact with attachment figures (Rime, 2009). For negative episodes, the sharing process should also reactivate the negative emotions and memories, and therefore, one would logically expect sharing to occur less often. However, research indicates that people are still motivated to share negative episodes because they still experience benefits from doing so that outweigh the unpleasantness associated with re-experiencing the emotions when the sharing occurs.

Rime (2007) outlined three classes of regulation needs that are required after a negative emotional experience that include socioaffective needs, cognitive needs, and action needs. Socioaffective needs result from the destabilization effect of the emotional episode and include comforting and support, which are obtained from the social environment. Cognitive needs allow a person to “overcome perseveration of the episode impact” through “reorganization of motives, modification of schemas, re-creation of meaning and reframing” (Rime, 2007, p 474). Lastly, action needs rebuild feelings of control, mastery and self-esteem, which may have been damaged in the emotional episode and can be restored through new experiences.

Motivations for Social Sharing of Emotion

People engage in social sharing of emotion for a variety of reasons. After reviewing four studies, Rime (2007) identified twelve classes of motives for socially sharing an emotion.

1. Rehearsing	Recalling, reexperiencing, memorizing, remembering, and rehearsing
2. Venting	Expressing, searching for relief, getting steam off, alleviating, blowing off steam, and catharsis
3. Help and support	Obtaining comfort, support, listening, sympathy, help, being listened at, receiving help/support/understanding, and being understood
4. Comfort/consolidation	Being consoled and comforted
5. Legitimization/Validation	Receive approval, being legitimized, and understood
6. Clarification and meaning	Understanding, finding explanation and/or meaning, analyzing what happened, finding order, gaining cognitive clarity by receiving feedback, and finding words to express
7. Advices and solutions	Obtaining advice, receiving guidance, knowing about another person’s view, receiving advice and finding solutions
8. Informing and/or warning	Bringing one’s experience and preventing others from making the same mistake
9. Bonding	Being in touch, relating, escaping loneliness, and strengthening social links
10. Arousing empathy	Touching/moving others and affecting the target
11. Gaining attention	Impressing others, distinguishing oneself, eliciting interest, and managing the impression that other people have of you
12. Entertaining	Amusing another person

Table 4: Motivations for Socially Sharing an Emotion (Rime, 2007)

These motives include rehearsing, venting, help and support, comfort and consolidation, legitimization and validation, clarification and meaning, advice and solutions, informing and warning, bonding, arousing empathy, gaining attention, and entertainment. These are described briefly in the Table 4.

Later work on motives (Duprez, Christophe, Rime, Congard, and Antoine, 2015) identified seven factors from 39 items that were used to create the Social Sharing Motives Scale, which include the following: Clarification and meaning, Rehearsing, Venting, Arousing empathy/attention, Informing and/or warning, Assistance/support and comfort/consolidation, Advice and solutions. These are largely consistent with those identified by Rime (2007).

From Pass Along to Viral: Propagation of social sharing of emotion in a social network

Exposure to the social sharing of an emotion is also likely to result in an emotion-eliciting event for the listener (i.e. addressee), which may lead him/her to later share that experience with others. Rime and colleagues refer to this as secondary sharing of emotions (Christophe & Rime, 1997). Likewise, secondary sharing of emotions is also likely to elicit an emotional response in those listeners, and therefore, tertiary sharing of emotions is anticipated (Rime, 2007). As such, the expression of one emotion-eliciting event can create a chain reaction of social sharing of emotion across social networks (Rime, 2009). The intensity of the emotional response varies depending on the intensity of the emotional experience to which the individual is exposed. As such, frequency of secondary sharing was related to the intensity of the episode with more intense episodes eliciting more repetition of secondary sharing (Rime, Finkenauer, Luminet, Zech, and Philippot, 1998; Curci and Bellelli, 2004; Christophe & Rime, 1997, Rime 2007, Rime 2009). Research on rumors and urban legends offers further support with research indicating that circulation of stories is a function of the emotional rather than informative aspects (Heath, Bell & Sternberg, 2001), with frequency of sharing and width of distribution higher for more emotional stories. Additionally, social sharing can also have effects on brand communities, in which social sharing results after an emotional event

strikes the community collectively. “In this case, the propagation consequences are geared up in a spectacular manner, both because there are as many sharing sources as there are members in the community and because every sharing reactivates felt emotions among interactants, thus reloading the propagation flow” (Rime, 2007, pg. 307).

This social emotion sharing propagation chain has also been identified in other research areas, such as Hatfield, Cacioppo, and Rapson’s (1994) emotional contagion, which investigates the transfer of emotions between people. It states that the positive or negative affect of one person can influence the people with whom that individual interacts. Schoenewolf (1990) defines emotional contagion as “a process in which a person or group influences the emotions or behavior of another person or group through the conscious or unconscious induction of emotion states and behavioral attitudes” (Schoenewolf, 1990, pg. 50).

While most research on social sharing of emotions has been limited to offline and dyadic contexts (see Rime 2009 for review), individuals are increasingly turning to social network sites to express their emotions and researchers are beginning to investigate SNS as a venue for emotional expression (Bazarova, Choi, Sosik, Cosley, and Whitlock, 2015; Kivran-Swaine and Naaman, 2011). It is possible that people are finding SNSs valuable for the ability to reach either a large, broad audience or a small, targeted audience depending on their resulting needs from the emotional experience.

In this chapter, we have reviewed general emotion literature, including explicating the two theoretical approaches to the study of emotion. These included the dimensional approach, which characterizes emotions based on a set of underlying dimensions (i.e. valence and arousal) and the categorical approach, which treats emotions as a system of discrete emotional categories (i.e. fear, joy, disgust, etc.). Then, in order to understand why exposure to emotional content might stimulate social interaction and the sharing of the message, the theory of Social Sharing of Emotion was reviewed. Using this theory, motivations for social sharing of emotion and how social sharing could

result in the propagation of the emotion as it spreads through a social network were investigated. The next chapter will examine nonprofit usage of discrete emotions and the anticipated effects of these emotions on pass along behavior.

Chapter 4: Nonprofit Usage of Emotion and its Effect on Pass Along Behavior

“When an organization’s employees and volunteers all embrace a common brand identity, it creates organizational cohesion, concentrates focus, and reinforces shared values” (Kylander and Stone, 2012, pg. 39). A strong brand community with high levels of cohesion between the organization and the public will yield a greater potential for social impact because brand community members will be willing to contribute much needed time and resources to support the organization's goals and mission (Kylander and Stone, 2012). While emotion has been identified as being significant in social bonding and relationship maintenance, it is unknown the extent to which nonprofit organizations are utilizing emotion when sending out social media messages to their community of supporters. Given the nature of nonprofit organizations in their orientation to bring awareness and/or assistance to social issues or groups of people, it seems reasonable to assume that nonprofits would likely often include emotional pleas in their Twitter posts. However, little research exists regarding the level or type of inclusion of emotional content in nonprofit Twitter messages.

It is likely that due to brand identity management concerns, joy may be utilized more frequently than the negative emotions like fear, disgust, or anger. Additionally, nonprofits may also find success using anticipation to build excitement for their upcoming events. Furthermore, given the underlying importance of trust in building relationships, it too may be frequently utilized. However, no research known to the authors has investigated nonprofit usage of these discrete emotions. Only one study could be identified as investigating any emotion-related content in nonprofit social media posts, and emotion was not a focal point of interest in the study. Specifically, Waters and Jamal (2011) manually content analyzed tweets and reported that about half of nonprofit tweets contained expressions of emotions (54.9%) and manually coded these for happiness (51.2%), fear (24.3%), hope (12%), humor (10.3%), and sadness (2.1%).

Furthermore, not only is the usage of emotion of interest, but also the effect, if any, that the inclusion of each discrete emotion has on pass along behavior. For a message to be spread virally

there must be something unique or powerful about the message that encourages others to pass the message along (Dobele et al, 2007). Arguably, in order for a message to be powerful, it must elicit an affective response. Therefore, emotion likely plays an important role in pass along behavior, as “emotionally evocative content may be particularly viral” (Berger and Milkman, 2012, pg. 2). Marketing literature has long shown that emotional appeals can be an effective means of persuasion and emotion plays a pivotal role in the formation of judgments and attitudes regarding advertisements and messages (Edell and Burke 1987; Royo-Vela 2005; Faseur and Geuens, 2006). People have a tendency to attend to emotional rather than neutral stimuli (Anderson, 2005; Eastwood, Smilek, and Merikle, 2001) and emotional information is prioritized and receives privileged access to attention (Vuilleumier, 2005). This is particularly true in cases where attentional resources are limited (Vuilleumier & Schwartz, 2001) as is the case with most marketing communications messages. Additionally, prior research indicates that use of emotional words or emotional framing results in increased cognitive processing and increased attention (Bayer, Sommer & Schact, 2012; Smith and Petty, 1996). This increased attention or involvement leads to a higher likelihood of a behavior response to the emotional stimuli, which may take the form of information sharing (Luminet, Bouts, Delie, Manstead, and Rime, 2000; Rime, 2009).

Messages that elicit emotion often resonate more with the reader and are more likely to be passed along (Phelps et al., 2004). Emotion is arguably a large reason why messages become viral. Lindgreen and Vanhamme (2005, pg. 125) suggest “emotions are key drivers of viral marketing campaigns”. The inclusion of emotion into messages is one way to provide provocative content that others want to pass along and is considered by some to be a primary reason why some marketing content goes viral (Chu and Kim, 2011; Porter & Golan, 2006; Golan and Zaidner, 2008; Phelps et al., 2004). Viral marketing research on email messages has found that the inclusion of emotion (Eckler and Bolls, 2011) and use of different emotional tones influences the likelihood that the message will be forwarded, particularly hedonic messages (Chiu, Hsieh, Kao, and Lee, 2007).

Huang, Chen and Wang (2012) illustrate that the quality of the content is a primary factor in sharing decisions while the expected response has an indirect influence. Viral video ads that contain material could be considered “provocative” or “crude”, including content relating to sex, violence, and nudity, often accompanied with humor, typically is more often shared (Porter and Golan, 2006, pg. 31). Dobeles and colleagues (2007, pg. 301) state that a viral campaign must “capture the recipient’s imagination in a unique or unforgettable way”. However, while it is established that emotion has an effect on pass along behavior, the effect of the inclusion of various discrete emotions has on pass along behavior still remains unclear.

In contrast to a discrete emotion approach where specific emotions are investigated, initial corporate eWOM and viral marketing research have primarily utilized a dimensional approach to investigate the effect that valence and arousal have on sharing behavior where the emotional experiences are investigated by analyzing the underlying dimensions of the emotion. Relevant research utilizing the dimensional perspective were reviewed in the previous chapter. This research, in contrast, seeks to investigate nonprofit usage of eight discrete emotions (joy, sadness, fear, anger, disgust, trust, anticipation, surprise) and the relationship between these discrete emotions and pass along behavior of nonprofit social media messages. As such, nonprofit usage of discrete emotions and the relationship between these discrete emotions and pass along behavior will be discussed in the following section.

DISCRETE EMOTION

Initially, most research regarding emotion and message virility focused on the valence dimension often utilizing sentiment analysis. Research utilizing the dimensional perspective then focused on arousal, establishing that the higher arousal levels within the message can increase pass along behavior. However, research is just beginning to investigate the influence of specific discrete emotions on pass along behavior. For example, the connection between the discrete emotion’s specific action tendency and pass along behavior may prove to be a worthwhile investigation, given

that the behavior of passing along messages involves an action. Discrete emotions with particular action-oriented tendencies may be associated with a higher likelihood that the message is reposted. However, it is likely that while action tendencies may aid in understanding the relationship between discrete emotions and pass along behavior, it is likely that other factors may need to be investigated as well. This research takes a first step in understanding the role that discrete emotions play in pass along behavior.

This research will utilize Plutchik's (1980) set of eight basic discrete emotions (surprise, anticipation, joy, sadness, anger, fear, disgust, and trust). Basic emotions were chosen because they have been found to be constant across cultures. Facial expressions, for example, for basic human emotions have been identified as being identical across cultures (Ekman and Friesen, 2003; Ekman, 2005). Focusing on basic emotions, therefore, could increase the potential contribution and usability of the results. Additionally, while there are no universally agreed upon set of basic emotions, joy, sadness, anger, and fear are generally all accepted as basic emotions (Fontaine, Scherer, and Soriano, 2013), each of which is included in Plutchik's set. Additionally, Plutchik's set also includes surprise, which has been identified as being potentially influential in eWOM and viral marketing literature. Plutchik's set (1980) of eight basic emotions will now briefly be reviewed, paying particular attention to the manner in which nonprofits may utilize each emotion and the likely effect that emotional inclusion may have on pass along behavior of nonprofit social media messages. This chapter concludes with the research questions that guide this dissertation.

Surprise

Surprise arises when outcomes are unexpected or misexpected and can either have a neutral, positive or negative valence depending on the situation. Surprise stems from a schema discrepancy results in responses of amazement and astonishment (Schutzwohl, 1998; Ekman & Friesen, 1975). When expectations are disconfirmed or when surprises or unexpected events occur, attention is mobilized to the production of meaning (Rime, 2009; Weick, 1995). The physiological response is

a startle response, in which ongoing activity is interrupted and attention reorients toward the new event/stimuli. The emotion of surprise developed to quickly divert people's attention to the stimulus and motivate them to engage in a specific action (Plutchik, 1980). Surprise is a sense of astonishment towards the unexpected and occurs when there is a disconnect between expectations or assumptions and reality.

Research has indicated that surprise activates the reward centers of the brain (Berns, McClure, Pagnoni, and Montague, 2001), diverts attention to the stimuli (Horstmann & Herwig, 2016; Itti & Baldi, 2005), drives the motivation to learn (Barto, Mirolli & Baldassarre, 2013) and is associated with the release of the hormone and neurotransmitter noradrenaline which is responsible for concentration (Preuschoff, Hart, and Einhauser, 2011). The disruptive effect of surprise that results from the perception of the novelty in the environment and brings it into conscious awareness (Frijda, 1986, Oatley, 1992; Roseman et al, 1994, Scherer, 1984) may make it more likely that individuals pay attention to and reflect on marketing messages containing surprise.

Unlike most of the other basic emotions (i.e. joy, sadness, fear, trust, anger, and disgust), surprise by itself has no valence in that it can be perceived as neutral, positive or negative. Although it has no valence, it is typically succeeded by another emotion that will affect the overall valence of the emotional experience, which is why people talk about good surprises or bad surprises (Ekman and Friesen, 1975). Additionally, some suggest that surprise intensifies our emotions, so that an individual who feels joy (or anger, for example) after being surprised will feel more joyful (or angry) than if they had not been previously surprised (Desai, 1939). Given that higher arousal levels lead to greater sharing propensity, including surprise in nonprofit messages may make it more likely that they are attended to and shared.

Luna and Reninger (2015) have recently suggested that surprise regardless of its size activates the following sequence in the brain: freeze, find, shift, share (Freeze and pay attention, find an explanation, shift your perspective, and share your experiences with others). The interruption and

reorientation of attention combined with the physiological changes may encourage interactions with others. As surprised individuals are engaged in causal search and attribution and schema updating, they may turn to others to help alleviate this burden (Soderlund, 1998). Events involving surprise are likely to be associated with a greater sharing propensity as individuals look to others to help them “unfold” the emotional experience and try to conform it to the rules of logical thinking (Rime et al, 1998).

Therefore, it is not surprising that past research have suggested that including the emotion of surprise within the marketing message may be particularly helpful for encouraging pass along behavior (Lindgreen and Vanhamme, 2005; Dobeles et al., 2007). While it has not been specifically investigated in nonprofit social media messages, results are anticipated to be similar.

Anticipation

Anticipation is the process of imaginative speculation about an expected or longed-for future event. We often use anticipation to foresee possible outcomes and emotions, which can then influence decisions (Mellers Schwartz, and Ritov, 1999). Like surprise, anticipation is also non-valenced in that it can be perceived as neutral, positive or negative and may be accompanied by other emotions, such as pleasure, excitement, or anxiety. Excitement for a future event that you are looking forward to would be considered anticipatory reward, which allows an individual to get excited about a situation before it occurs and lets him/her to look forward to the experience. In contrast, anticipatory regret allows an individual to consider the possibility of regretting the outcome of a situation before it occurs (Zeelenberg, 1999).

Compared with retrospection, people have more intense emotions during anticipation of events that were positive, negative, routine, or hypothetical (Van Boven and Ashworth, 2007). Like surprise, there is uncertainty involved with anticipation, which may result in an amplification of emotional reactions (Wilson, Ceterbar, Krenmer, and Gilbert, 2005). We often assume that future emotions will be more intense and last longer than they do. This amplification of emotional reactions

may make sharing behaviors more likely and recent research indicates that this may be true. Specifically, Libert and Tynski (2013) found emotions related to both surprise and anticipation (i.e. curiosity, interest, amazement, astonishment, and uncertainty) were highly prevalent among viral videos. Therefore, anticipation can be used by nonprofit organizations to build a sense of excitement around the cause, is likely used frequently by nonprofit organizations, and likely is shared frequently as well.

Joy

Joy is a positively valenced emotion that is associated with a heightened likelihood of approach behavior (Davidson, 1992) and a high activation level (Averill and More, 2000; Ellsworth and Smith, 1988). It is often used interchangeably with happiness and is a positive or pleasant emotion (Lazarus, 1991). Emotion researchers have theorized that joy is elicited when considerable progress toward a desirable goal has been achieved either expectedly or unexpectedly (Lazarus, 1991). Therefore, nonprofit organizations may use joy to express victories, both large and small, related to their cause.

Positive emotions, including joy, have also been associated with broadening the scopes of attention and cognition compared to neutral conditions (Frederickson and Branigan 2005). Increased performance on math problems and short-term memory is also associated with positive emotions like joy and happiness (Bryan and Bryan, 1991; Bryan, Mathur, and Sullivan, 1996; Yasutake and Bryan, 1995). Therefore, it is plausible that nonprofit social media messages may be better attended to and remembered when containing joyful message characteristics.

Additionally, when groups of people express joy, psychological distance is decreased (De Rivera, Possell, Verette, and Weiner, 1989) resulting in a desire to celebrate and brings individuals together. Nonprofit organizations can, therefore, use joy to help build a community of supporters and bring their community together. Joy has also been associated with increased helpfulness and cooperation (Oatley and Jenkins, 1996) and therefore, it is likely that nonprofit organizations use joy

to seek assistance in their endeavors. Additionally, joy is associated with feelings of freedom (Frijda, 1986; Izard, 1977) and the action tendency is to move towards something (Roseman, 2001). Therefore, individuals may be more likely to forward nonprofit Twitter messages that contain joy. Lastly, due to impression management and brand image concerns, it is likely that positively valenced content is particularly prolific on social media. Therefore, it is likely that nonprofits utilize joy in their Twitter communications and that messages containing joy are often shared.

Sadness

Sadness is elicited as a result of physical or psychological loss or separation, or by failure to achieve a goal (Frijda, 1987; Lazarus, 1991), particularly when the circumstances could have been reversible (Ellsworth and Smith, 1988, Stein and Levine, 1990) or were uncontrollable (Frijda, Kuipers, and Schure, 1989). It is a negatively valenced low arousal emotion that results in distress and downhearted affect (Ekman & Friesen, 1975). Those experiencing sadness feel isolated, wistful, or a sense of resignation. The action tendency is isolation or withdrawal or to “stop moving toward something” (Roseman, 2001) and is accompanied by no action or inaction (Lazarus, 1991) and can be associated with solicitation for comfort or to dwell on what was lost (Frijda, 1986; Izard, 1977; Lazarus, 1991; Roseman et al, 1994). It has been described as the “absence of interest” and as a “null state” (Frijda, 1987) and is associated with retreating from the outside world (Tomkins, 1963). This state of inactivity results in a reduction of input (both thoughts and feelings) from outside and slows down mental processing (Frijda, 1987). This may allow more elaboration and reflection on the course of events that resulted in the loss (Tomkins, 1963). Stein and Jewett (1986) suggest experiencing sadness is a two-stage process. In the first stage, the individual abandons the goal that has been irrevocably lost while in the second phase, the individual attempts to change the emotion state by diverting attention or engaging in wishful thinking. This process may allow the individual to pay closer attention to the pursuit of a goal and obtain insights into future plans (Stein and Jewett,

1986). Therefore, sadness motivates problem solving by causing individuals to focus inward for possible solutions or to seek help passively from others (Izard, 1977, 1993).

The reduction in inputs from the outside may indicate that once exposed to a sad message, individuals may tune out other outside noise (i.e. other social media messages) and focus on the message, which caused the sadness. Then the nonprofit could encourage the second stage by supplying the individual with elements of wishful thinking regarding how the situation could be changed. Therefore, sadness may be being successfully used by nonprofits to encourage behavioral change or to solicit helping intentions.

Additionally, sadness can lead the affected individual to place social or practical demands on others, which can result in altruistic acts, thereby tightening social bonds (Izard, 1977). The inclination towards helping others can spread as others are also motivated to reduce suffering either through self-identification (Cialdini, Brown, Lewis, Luce, and Neuberg, 1997) or through altruistic motives (Baston et al, 1997). Therefore, sadness may be used by nonprofits to elicit sympathy in a campaign (Dobele et al, 2007) and usage of sadness in social media communications may strengthen online communities and brand attachments.

However, given continued usage of negatively valenced content may have a negative effect on brand image, it may not be likely that sadness is used very frequently among many nonprofits. Indeed, results from the Waters and Jamal (2011) study suggest this might be true, as sadness was only identified as being used in a small fraction of their sample of nonprofit tweets. While likely not used very frequently, some sectors may find it more beneficial to use sadness than others may. Because it is best used when no individual can be held responsible for an individual's plight, or when an organization does not want the victim to feel responsible for his or her own trouble, some nonprofit sectors, like human services (such as emergency preparedness), or health services (such as mental health) may be more likely to use sadness than other sectors.

However, even if some organizations use sadness, the low arousal level of the emotion and the associated preference for inactivity (Rucker and Petty, 2004) combined with impression management concerns may make it unlikely that nonprofit messages containing sadness will be shared widely by individuals on social media.

Anger

Anger is a negatively valenced, high arousal emotion. Anger is elicited when someone can be identified as causing an injustice or when a goal can be met by expressing anger (Power & Dalgleish, 1997). “If the barrier really prevents the attainment of a highly desirable goal or some aspect of self-expression, anger is almost certain to occur eventually” (Izard, 1977). The expression of anger is associated with an increased likelihood to approach, and as such is associated with appetitive behavior (Harmon-Jones and Allen, 1998; Harmon-Jones and Seligman, 2001; Horstmann, 2003). The action tendency is to attack or remove the blameworthy object (Frijda, 1986, Lazarus, 1991) to “mobilize one’s energy and defend oneself with great vigor and strength” (Izard, 1977, pg. 333). This forward action tendency is unique among the negative emotions (Frijda, 1986). It is associated with increased heart rate and blood pressure (Cacioppo, Berntson, Larsen, Poehlmann, and Ito, 2000) and the left inferior frontal gyrus region of the brain is typically activated by anger provoking stimuli (Vytal and Hamann, 2010). Furthermore, anger is associated with highly focused attention on the desire to strike out or seek revenge and is often conducive to constructive problem solving, although the impulsiveness associated with intense anger may be counterproductive (Arnold, 1960; Averill, 1983). Additionally, research has found that people feeling angry had more optimistic risk assessments compared to those who were experiencing fear and that the different control appraisals mediated this relationship (Lerner and Keltner, 2001). Following that, those experiencing anger may be more likely down weight the social risks involved in passing along nonprofit messages than those experiencing other emotions, and therefore, may be more likely to pass along nonprofit social media messages containing anger.

Additionally, although anger is considered a negative emotion, it is unique among the negative emotions because it can also be associated with some level of pleasure by the accompanying expectation of sweet revenge. Anger has been associated with both maladaptive functions such as social conflict and with adaptive function such as increasing self-confidence to stand up against obstacles (Wolf and Foshee, 2003; Holt, 1970). Nonprofits may be successful utilizing anger in their campaigns when an individual's plight can be attributed to the actions of others. Anger is also unique in its ability to sustain a high level of arousal. Given that high arousal emotions, like anger, are believed to elicit more sharing behavior, nonprofit marketing messages containing anger may be more likely to be shared. Recent research suggests that this may be true. Using tweets from China's Twitter-like platform, Weibo, Fan, Zhao, and Chen (2013) mapped tweets to four emotions (anger, joy, disgust and sadness) and found that tweets containing anger spread more quickly and broadly. Kim & Yoo (2012) found that the inclusion of anger and anxiety (but not sadness) in the message content increased retweet rates.

Given anger results in highly focused attention, has the ability to mobilize and sustain high energy levels, and is associated with a desire to strike out or get back at the anger source, (Averill, 1982; Arnold, 1960; Frijda, 1986; Izard, 1977; Lazarus, 1991; Roseman et al, 1994), nonprofit organizations may find success intentionally inducing anger in their social media messages to make sharing behavior more likely, particularly when reason for the anger can be attributed to the actions of others.

Fear

Fear is a strongly unpleasant emotion that is elicited in the context of imminently upcoming danger or harm (Lang, Davis, and Ohman, 2000; Lazarus, 1991) or when pain or danger is anticipated (Ekman & Friesen, 1975; Oatley and Jenkins, 1996). Threatening situations can either be innate or learned and individual factors, like biological or sociocultural differences influence fear thresholds (Izard, 1977). It is a negatively valenced, high arousal emotion that is associated with an increased

likelihood of avoidance or aversive behavior (Harmon-Jones and Allen, 1998; Harmon-Jones and Seligman, 2001). Due to a desire for protection, it is linked with the urge to avoid the threatening object or to escape (Frijda, 1986; Plutchik, 1980; Izard, 1977). It is associated with heightened autonomic nervous system activity and a feeling state comprised of high tension and activity (Izard, 1991). Fear is associated with uncertainty stemming from insecurity over what the individual should do and if he/she will be able to escape the threatening object (Smith and Ellsworth, 1985), followed by engagement in threat avoidance behaviors (Lang, Bradley, and Cuthbert, 1997; Rosen and Schulkin, 1998). As part of the threat management system (Bracha, 2004), fear produces “tunnel vision” to the current environment to assist in identifying and assessing threats. It creates a “readiness for reaction” that can include behavioral responses such as fight, flight, or freeze, depending on the unique circumstances of the threat (Blandard et al, 2011; Griskevicius, Goldstein, Mortensen, Sundie, Cialdini, and Kenrick, 2009, Ohman and Mineka, 2001; Phelps and LeDoux, 2005). Attention is also focused on the present (Tooby and Cosmides, 2008; Langer, Wapner, and Werner, 1961) and those experiencing fear have been shown to have enhanced memory for people and objects in their immediate environment (Becker, 2009; Phelps, Ling, and Carrasco, 2006). Additionally, people concerned with fear have been shown to be more likely to perceive future events as risky and to overestimate the likelihood of future aversive events (Amin and Lovibond, 1997; Hermann, Ofer, and Flor, 2004; Lerner and Keltner, 2000; Tomarken, Mineka, and Cook, 1989).

Unlike many of the other discrete emotions discussed in this research, research in the use of fear appeals is quite extensive (for meta analyses, see, for example, de Hoog, Stroebe, and de Wit, 2007; Earl & Albarracin, 2007; Witte and Allen, 2000). A fear appeal is a persuasive communication that attempts to arouse fear to promote precautionary motivation and self-protective action (Rogers and Deckner, 1975). As such, fear appeals generally contain two types of information, namely a threat and an action recommendation. Information regarding both the susceptibility and the severity are included in the threat and both are necessary for fear arousal. Opportunities to avert or neutralize

the posed threat are then provided by recommending a self-protective action. Further, supporting messages are offered suggesting that the self-protective actions are successful in warding off the threat, are easy to implement, and that the individual is fully capable of executing the necessary actions (Witte, Meyer, and Martell, 2001).

Researchers have developed several models to explain fear appeal effectiveness including the fear drive model (Janis, and Feshbach, 1953; Ray and Wilkie, 1970), the parallel response model (Leventhal, 1971), protection motivation theory (PMT) (Rogers, 1975), ordered PMT (Tanner, Hunt, and Eppright, 1991), the extended parallel process model (EPPM) (Witte, 1992; Witte et al, 2001) and the stage processing model (De Hoog et al, 2007). However, the two most widely applied models are the PMT (Rogers, 1975) and EPPM (Witte et al, 2001).

Over the years, several meta-analyses have been conducted on fear appeals research that utilizes these models. Ruiter, Kessels, Peters, and Kok (2014) summarize the aspects of fear appeals that have been identified as being most likely to motivate self-protective actions as including 1) strengthening self-efficacy so the individual believes he/she is capable of successfully performing the self-protective action, 2) building response efficacy so the individual believes that the suggested action will minimize the threat, 3) promoting an awareness of susceptibility so that the individual believe the threat is personally relevant and 4) NOT promoting the severity of a threat in a highly emotional manner. Specifically, research indicates that fear appeals may backfire when fear is attempted to be invoked at too high a level.

Much research exists examining and documenting the success of fear appeals and showing its effectiveness for nonprofit and health communication appeals in other media. It is, therefore, likely that nonprofits are also utilizing fear in their social media messages as well. Furthermore, considering fear's unique set of appraisals, cognitions, evaluations, and behaviors, nonprofit usage of fear in their social media message may be associated with increased pass along rates. Specifically, fear creates "tunnel vision" and increases focus of attention on the threat, making other peripheral

information less salient while focus remains on the nonprofit's message. Additionally, as evaluations that future events are more risky are combined with a "readiness to act", individuals may feel heightened need to pass along the message to others immediately. Therefore, nonprofits may be able to utilize fear successfully in their campaigns to gain short-term support for their cause (Dobele et al., 2007).

Trust

Interpersonal trust has long been identified as a vital element of social life (Blau 1964). It has an extensive history of research that spans across several disciplines and continues to attract attention. Trust propensity can be influenced by past experience, genetic predisposition, personality characteristics, and cultural norms. Generally speaking, definitions of interpersonal trust include aspects of a subject, an action/behavior, a future action (i.e. intention) and or expectation (i.e. belief) (see meta-analysis Castaldo, 2008). Common definitions within management and marketing research literature include the following:

- "A psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau, Sitkin, Burt, and Camerer, 1998, pg. 395.)
- "A willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Mayer, Davis, and Schoorman, 1995, pg. 712).
- "The extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another" (McAllister, 1995, pg. 25).

Interpersonal trust "operates under conditions of acknowledged interdependence and is characterized by a willingness to accept vulnerability and risk that is based on confident expectations that another person's future actions will produce some positive result" (Borum, 2010).

When exchange partners interact in ways that demonstrate their care for the needs and benefits of others, trust is strengthened (Holmes and Rempel, 1989). In general, trust is affected by perceptions of the trustee's ability, integrity, and benevolence, but in addition, these attributes are also influenced by past experiences and the trustee's reputation (Butler, 1991).

More recently, scholars have agreed on the need to examine the emotional aspects of trust separately, yet complementarily from the more cognitive approach (Lewis and Weigert, 1985; Ganesan, 1994; Doney and Cannon, 1997; Lewicki, Tomlinson, and Gillespie, 2006). Lewis and Weigert state that "trust in everyday life is a mix of feeling and rational thinking (1985, pg. 969). Cognition-based trust involves a deliberate appraisal of the characteristics of the trustee in combination with a process of weighing the benefits of trusting versus the risks (McAllister, 1995). It "arises from an accumulated knowledge that allows one to make predictions, with some level of confidence, regarding the likelihood that a focal partner will live up to his/her obligations" (Johnson and Grayson, pg. 501). It is related to the trustor's ability to forecast with varying degrees of certainty how the trustee will likely behave in a given task or in a particular environment based on how well the trustor thinks he/she knows the trustee.

In contrast, the affective component of trust is "based on shared goals, beliefs, values, and even identities among the parties" (Borum, 2010). Generally, affective trust has a more emotional connotation and is associated with the confidence that an individual places in the trustee based on feelings generated by the level of care and concern that the trustee displays (McAllister, 1995; Costigan et al, 1998; Johnson and Grayson, 2005). There is an existence of an emotional bond between the individuals with an other-focus rather than purely a focus on the interests of the self (Chen, Chen, and Meindl, 1998). It encompasses perceptions of the strength of the relationship and of the security felt within the relationship (Lewis and Weigert, 1985, McAllister, 1995). It stems from the expression of "genuine care and concern for the welfare of partners" (McAllister, 1995, pg. 26) and is "based on beliefs that the exchange partner cares about your welfare, will act positively

towards it and take care to avoid harming it (Huang and Wilkinson, 2013, pg. 456). Many terms have been utilized in the study of the more affective basis of trust including “identity-based trust” (Coleman, 1990), “relational trust” (Rousseau et al, 1998), “affect-based trust” (McAllister, 1995) and “affective trust” (Swan, Bowers, and Richardson, 1999; Anderson and Kumar, 2006). Given the focus of this research is nonprofit usage of emotion in social media messaging, this research primarily focuses on this more emotional form of trust in this research.

The emotional basis of trust stems from a positive expectation regarding another’s future actions. The actions of the trustee will impact the trustor’s well-being even though the trustor has no control over the actions of the trustee, and so trust is encapsulated by a feeling that the trustor can depend on the trustee. This “positive expectancy and safe dependency is a variant or application of confidence” (Barbalet, 2011, pg. 41). The eliciting conditions are “approving of one’s own assured expectation” of the future actions of the trustee (Ortony, Clore, and Collins, 1988, pg. 173; Barbalet, 2011, pg. 41). Not only is trust based on a feeling of confidence in another person’s future actions, it is also related one’s confidence in making a judgement of that person (Barbalet, 2011; Luhmann, 2000). Therefore, when trust is broken, there are not only other-directed emotions elicited like anger, but also self-directed emotions, like self-blame. Therefore, broken trust reflects on both the trustee and the giver of trust, as he/she makes judgements regarding his/her own ability to assess others and their future actions. However, unless trust is broken, the self-assessing component remains in the background, with the focus being on the trustee (Barbalet, 2011).

Some researchers (Lewicki and Bunker, 1995, 1996) believe that interpersonal trust begins with a cognitive-based trust with a probability or risk-based assessment, weighing the likelihood that the trustee will behave in a trustworthy way versus the costs of betrayal. This would occur when relationships are new, when there is little risk involved, or when prior trust violations preclude deeper relationship appraisals. Rousseau (1998) suggests that over time the cognitive, probability-basis of trust becomes less important and the relational basis becomes more important, primarily due to the

growth of each party's knowledge of the other, shared experiences, proximity, and cooperative efforts. This results in a stronger emotional bond between the parties. Therefore, affective trust appeals may work best for nonprofit organizations that have some history of shared experiences with their shared community. Because affective trust facilitates social bonding, nonprofit organizations should also be able to utilize affective trust appeals to grow or deepen the relationship with their community members.

Additionally, group membership within the nonprofit community itself can also provide a category-based trust (Kramer, 1999), essentially, allowing individuals to trust each other and the nonprofit because of their group membership, thereby reducing cognitive load by offering this mental shortcut. Furthermore, individuals are more likely to trust those who they identify as being part of their "in-group" or with whom they share close social relationships, known as identity-based trust (Coleman, 1990). In-group status provides an initial level of trust that is higher for in-group members than for out-group members and predisposes them to perceive them more positively and to give other in-group members preference. Nonprofits may be able utilize category-based trust or identity-based trust to further their cause by priming community membership in their messaging. Doing so, may increase pass along behavior, as community members are transformed into signals or representatives of the organization's content (Akerlof and Kranton, 2005).

It is clear that a public's trust in a nonprofit organization is central to its purpose and performance. How an organization projects itself can influence public trust in the organization. Given the correlation between shared values, communication and trust (Morgan and Hunt, 1994), trust is dependent, at least in part, on the success with which shared values and common interests are communicated through its marketing messages. Therefore, it is likely that top nonprofits are including affective trust in their social media messages. Furthermore, by messaging to affective trust in its social media messages, nonprofits are able to reaffirm and strengthen the bond with their brand community and with the public more generally.

Disgust

Disgust is a negatively valenced emotion where evoking stimuli are objects or ideas that are either organically or psychologically spoiled (Rozin, Haidt, and McCauley, 1999). Disgust has been shown to activate the insula area of the brain (Vytal and Hamann, 2010) and is characterized by a revulsion feeling state that results from the closeness or ingestion of a noxious object or idea (Lazarus, 1991), and like fear, is associated with distancing and avoiding tendencies. Specifically, disgust results in a desire to immediately expel or distance oneself from the offending object, event, or situation (Rozin, Haidt, and McCauley, 1999; Lazarus, 1991; Smith and Ellsworth, 1985) and triggers a “shut out and get away” response (Smith and Ellsworth, 1985, pg. 833). Therefore, disgust is accompanied by withdrawal action tendencies (Gutierrez and Giner-Sorolla, 2007; Lazarus, 1999). Because of the strong reflexive avoidant nature of the emotion, message rejection may be more likely.

Additionally, disgust is a relatively short duration, low intensity emotion (Scherer & Walbot, 1994) and is associated with a strong sense of certainty (knowing what the problem is and what they need to do to deal with it) (Smith and Ellsworth, 1985). This low arousal level and strong certainty arguably may lead to less of a need to socially share the emotion with others, making pass along behavior less likely to occur.

Research on the relationship between messages that elicit disgust and persuasion is quite limited. Disgusts’ avoidant nature and protective function may make utilizing disgust unsuccessful as the only single elicited emotion. However, past persuasion studies have operationalized fear with disgust-evoking images (i.e. diseased lungs) and recently, the addition of disgust has been shown to enhance the effectiveness of persuasion and compliance of fear appeals (Morales, Wu, and Fitzsimons, 2012). Particular nonprofits may find success combining these two emotions in their social media messages. Additionally, nonprofits may also successfully utilize disgust in campaigns by using and eliciting humor from their target audience (Dobele et al 2007). However, as the focus

of this research is on the individual effects of emotions in nonprofit social media communications, future research should investigate the effect of combining various emotions as well as the emotional flow both within and between nonprofit social media messages on pass along behavior.

RESEARCH QUESTIONS

While nonprofits often utilize emotive pleas in their traditional marketing methods, research is lacking to identify if they also use emotional appeals in their social media messages. Furthermore, despite the growing interest in research in social media and WOM, research is just beginning to investigate the drivers of social-media sharing. Further, discrete emotions, which may impact sharing, have not been investigated fully, and no research to date to the authors' knowledge investigates how emotion influences the sharing of nonprofit messages. This research begins to address this gap by investigating the role Plutchik's (1980) set of eight basic discrete emotions play on the sharing of nonprofit tweets. Provided there has been a lack of research conducted in this area, this dissertation is guided by research questions, rather than theory-driven hypotheses.

Based on the literature provided on Twitter, emotion, socially sharing emotion, eWOM, and viral marketing the following research questions are proposed:

RQ1: Are nonprofit organizations utilizing discrete emotions (i.e. surprise, anticipation, joy, sadness, fear, anger, trust, and/or disgust) in their Twitter messages?

RQ2: What association (if any) do these eight discrete emotions (surprise, anticipation, joy, sadness, fear, anger, trust, and/or disgust) have with pass along behavior of nonprofit Twitter messages?

The next chapter will outline the methods that were used to address these research questions.

Chapter 5: Methods

SAMPLE SELECTION

A list of nonprofits was obtained from the 2016 Non-Profit Times list of the 100 top nonprofits. This most recent list includes the 100 largest non-educational nonprofits in terms of revenue in the United States and typically covers a wide range of nonprofit sectors. In order for a nonprofit to be eligible for the Non-Profit Times list, at least 10% of their revenue must come from public donations. The Non-Profit Times list has been utilized in prior nonprofit social media research (Guo & Saxton, 2014; Nah & Saxton, 2013; Walters & Feneley, 2013; Lovejoy & Saxton, 2012; Lovejoy et al 2012; Saxton & Waters, 2011).

Twitter was selected due to its widespread popularity as a microblogging service among nonprofits (Nonprofit Technology Network, 2016). Furthermore, research on user-generated content (UGC) indicates that Twitter contains more brand-central content than other social media sites, which is not surprising given its focus on sharing news, information, and opinions (Smith, Fischer, and Yongjian, 2012). Thus, Twitter was deemed appropriate for this study.

EMOTION LEXICON SELECTION

The rise of social media platforms have changed the way people can share what matters to them (Fulgoni, 2014), including how they consume, create, and share content about brands (Muntiga, Moorman, and Smit, 2011; Jansen, Zhang, Sobel, and Chowdury, 2009). This brings with it new challenges and opportunities for researchers and marketers to monitor and analyze the large volumes of text that are generated through social media. This, combined with the established connection between emotional content and message virality (Dobele et al, 2007; Berger & Milkman, 2012), has resulted in growing interest in utilizing automatic techniques for understanding the usage and effect of discrete emotions. Automatic labelling techniques have recently been applied in several similar contexts including online reviews (Yin, Bond, and Zhang, 2014; Felbermayr and Nanopoulos, 2016),

brand social media content (Araujo, Neijens, and Vliegenthart, 2015), and social media-based customer support (Herzig, Feigenblat, Konopnicki, Rafaeli, Altman, and Spivak, 2016) among others. To the author’s knowledge, this is the first research that focuses on automatic analysis of emotions expressed in nonprofit organizations’ social media messages.

Some of the more publically available and commonly utilized emotion lexicons include the WordNet Affect Lexicon, Affective Norms for English Words (ANEW), The Geneva Affect Label Coder, and the NRC-Emotion Lexicon. Given the focus of this research is on basic emotions, the only lexicons that can code for the four basic emotions (joy, sadness, fear, anger) are the NRC Word-Emotion Lexicon and the GALC. A single researcher created the GALC, while the NRC Word-Emotion Lexicon was created through crowd sourcing. Furthermore, in the context of online reviews, the NRC was shown to outperform the GALC (Felbermayr and Nanopoulos, 2016). Therefore, this research will utilize the NRC Word-Emotion Association Lexicon.

NRC-Emotion Lexicon

The NRC-Emotion Lexicon (Mohammad & Turnkey, 2013) is a crowd-sourced word-emotion association lexicon that maps words onto the eight discrete emotions. The word association lexicon contains a list of over 14,000 words with eight emotions (anger, fear, anticipation, trust, surprise, sadness, joy, and disgust).

Primary Emotion	No. of words
Anger	1,247
Anticipation	839
Disgust	1,053
Fear	1,476
Joy	689
Sadness	1,191
Surprise	534
Trust	1,231

Table 5: Number of Words in the NRC-Emotion Lexicon Associated with Each Primary Emotion

While it contains over 14,000 words, many are not mapped to any discrete emotion. Additionally, it allows the words to be associated with multiple discrete emotions simultaneously. It also maps words to provide valence associations on two measures, one positive and one negative. Table 5 summarizes the NRC-Emotion Lexicon in terms of the number of words contained in the lexicon that are associated with each of the eight emotions. Additionally, Table 6 illustrates examples of words that are associated with each of the eight emotions in the NRC-Emotion Lexicon.

Primary Emotion	Example words
Anger	abolish, destruction, fight, opposition, prejudice, punch, rage, riot, strike, vengeance
Anticipation	acquiring, adventure, attainable, develop, immediately, inquiry, opportunity, revive, savor, vision
Disgust	abnormal, blister, dirty, filthy, garbage, mess, morbidity, slimy, ugly, vulgar
Fear	abandon, afraid, dangerous, doom, flu, harm, horrified, panic, snare, tumor
Joy	adorable, amuse, charmed, cheering, entertain, flattering, outstanding, pleased, satisfied, welcomed
Sadness	absent, ache, cancel, cry, deceased, grief, heartache, lowest, miserably, worried
Surprise	abrupt, accidentally, marvel, prank, secrecy, suddenly, trick, unintentionally, unique, unpredictable
Trust	accountable, accurate, believing, chairman, durable, enable, familiar, loyalty, reassure, truth

Table 6: Examples from the NRC-Emotion Lexicon of Words Associated with Each Primary Emotion

Examining Plutchik's emotion set of basic emotions has several emotion-based advantages including:

1. Basic emotions are well founded in psychological, physiological, and empirical research.

2. Although there is no universally agreed upon set of basic emotions, anger, fear, joy, and sadness are generally all accepted as basic emotions among emotion theories (Fontaine, Scherer, and Soriano, 2013), which as mentioned previously are labelled with NRC.
3. Basic emotions have been found to be constant across cultures, with facial expressions for basic human emotions being identical across cultures (Ekman and Friesen, 2003; Ekman, 2005). Focusing on basic emotions, therefore, could increase the potential contribution and usability of the results.
4. Plutchik's set includes surprise, which has been identified as being particularly relevant and potentially influential in viral marketing literature.
5. Plutchik's set is comprised of both positive and negative emotions, which is particularly important given the debate regarding whether positive or negative content is more viral. Additionally, nonprofits may have more ability to successfully use a variety of emotions in their nonprofit communications compared to corporations, making the inclusion of both more important.
6. Plutchik's wheel allows blending of basic emotions to form other secondary emotions (i.e., Joy + Trust = Love, see Table 3 for more information), which can be utilized in future research examining pass along rates.

DATA COLLECTION

The first step of data collection was to determine which of the nonprofits on the 2016 Non-Profit Times list have Twitter profiles. The collection of each organization's Twitter handle was identified through a search on the organization's website supplemented with a search on Twitter. Given the US-focus of the Non-Profit Times list, the Twitter account, which targets the US, was chosen when multiple accounts are identified. When a US-specific account could not be determined, the account with the most number of followers was chosen. Additionally, only English language

profiles were utilized. Ninety-seven nonprofits on the 2016 Non-Profit Times list had Twitter handles. (Brother's Brother and Kingsway Charities had a Facebook page, but no Twitter account and New York Presbyterian Fund, which is associated with New York Presbyterian Hospital, only had an account for the hospital and did not have a Twitter account specific to the nonprofit fund.)

PHP code was utilized in conjunction with Twitter's REST API to obtain the most recent 3200 tweets sent by each of the nonprofit Twitter handles. Limiting the sample to the most recent 3200 tweets is a restriction set by Twitter. If the organization had not sent out 3200 tweets in its history with Twitter, all available tweets from the organization were collected. Nine organizations did not have 3200 tweets in their history, which included Cross International (1662), Harlem Children's Zone (1514), Jewish Federation of Metropolitan Chicago (1916), National Fish and Wildlife Foundation (1192), Patient Access Network Foundation (604), Step Up for Students (1962), Task Force for Global Health (1109), Marine Toys for Tots Foundation (561), and Woods Hole Oceanographic Institution (1400).

Prior to analyzing the data, to ensure the PHP code was working appropriately, a trial download was conducted and manually compared against a random selection of tweets obtained from the Twitter website. This process resulted in a sample of 288,906 tweets. The sample contains not only the textual content of the tweet, but also the date/time of the tweet, user ID number, user name, user screen name, user location, user description, the number of user followers, the number of user friends, the number of user favorites count, the user time zone, the user statuses count, the user language, and retweet count. This ensured that the PHP code could be used for analysis.

DATA PREPARATION

Tweet Type Annotation

Each tweet was first categorized into one of the following three mutually exclusive content types: Retweeted content (messages that begin with "RT", which is content that the nonprofit simply retweeted), Public message (messages that begin with "@", which is content that is directed to a

single user), or Original content (messages that neither begin with “RT” or “@”). All three types were included in the analysis of the inclusion of emotional content, but only Tweets identified as Original content were included in the pass along analysis.

The choice to retain only original content in the pass along analysis was made for a variety of reasons. The usage of user mentions and public messages illustrates a conversation or at least a link between two parties and it is possible that they are negatively associated with the mass diffusion of the message overall. Arguably, replies in particular are primarily directed as a conversation between two parties, and are, therefore, likely less interesting to the general public. Further, nonprofit research has shown that the relationship between user mentions and retweet rate is negative when the number of user mentions as a control variable is included (Saxton et al., 2015). Brand marketing literature also suggests significantly lower levels of retweets for messages containing user replies than for messages contain original brand content (Araujo, Neijens, and Vleigenthart, 2015). Ultimately, the aim of the research is to identify influential emotion-based message characteristics in original content to inform content generation and posting strategies of nonprofit organizations, so that they may increase the viral potential of their own social media messages. Therefore, only nonprofit messages containing original content were included in the pass along analysis.

Sector Annotation

Each organization was assigned a sector according to their National Taxonomy of Exempt Entities codes. Each tweet was then labelled with the corresponding sector code based on the organization sending the tweet.

Emotion Annotation

The inclusion of emotional content in the text of the tweets were coded using the NRC-Emotion Lexicon (Mohammad & Turnkey, 2013). In order to utilize the lexicon, additional PHP code was written. As previously mentioned, the NRC-Emotion Lexicon contains a dictionary of more than 14,000 words, each of which is classified into one or more emotion categories. The PHP code

first tokenized the tweet into separate words. Then it processed each word one at a time, searching the NRC-Emotion lexicon for a match. If a match occurred, the relevant emotion category score was incremented for that tweet. This process continued until the matching process had completed for each word in the tweet. The data indicated how many times words that are associated with each of the eight emotions appeared within each tweet.

DATA ANALYSIS

Inclusion of Discrete Emotions in Nonprofit Twitter Messages

The unit of analysis was the individual nonprofit organization's Twitter message (tweet). To understand words commonly utilized in nonprofit tweets that were associated with each discrete emotion, word cloud representations were made using an online tool available from wordclouds.com.

Effect of Discrete Emotions on Pass Along Behavior

The unit of analysis was again the individual nonprofit organization's Twitter message (tweet). The dependent variable of interest was the number of retweets each nonprofit tweet received. This form of engagement is arguably deeper than a simple "like" and is harder to elicit from the public, but is highly valued by marketers. Doing so not only extends the reach of the message beyond those who are following the brand, but also transforms the individual retweeting the message into an impromptu marketing agent for the organization, publically associating him/her with the organization. Arguably, this type of endorsement can carry more weight than a simple "like." Additionally, given there are no other reaction types on Twitter as there are with Facebook (i.e. sadness, anger, etc.), "likes" may be more likely to be associated with more positively valenced content. Therefore, this research focused on retweets as the dependent variable.

The independent variables are the eight discrete emotion variables created from utilizing the NRC-Emotion Word Association Lexicon. The operationalized of each is shown in Table 7.

Variable Type	Variable Name	Operationalization
Dependant Variable	Retweet	Number of times each tweet was retweeted
Independent Variables	Joy	Number of joy-related words
	Sadness	Number of sadness-related words
	Anger	Number of anger-related words
	Fear	Number of fear-related words
	Trust	Number of trust-related words
	Disgust	Number of disgust-related words
	Anticipation	Number of anticipation-related words
	Surprise	Number of surprise-related words
Organization-Level Controls	# followers	Number of followers
	# tweets	Number of tweets sent
	# days on Twitter	Number of days since the account was created
Message-Level Controls	# characters	Number of characters
	# user mentions	Number of user mentions
	Visual usage	Inclusion of photo or video
	# URLs	Number of URLs

Table 7: Model Variables and Operationalization

Both organization-level and message-level controls were utilized. Organization-level controls included number of followers, number of tweets to present day, and number of days on Twitter. Message-level controls included number of characters, and number of user mentions. Additionally, prior research indicates that engagement numbers are typically higher when visual content (i.e. photo or video) is utilized (Breakenridge, 2012; Fortin and Dholakia, 2005) or when URLs are present (Petrovic et al., 2011; Suh et al, 2010; Araujo et al., 2015). Therefore, these variables were used as additional message-level controls. These are consistent with controls used in other nonprofit Twitter research (Saxton and Waters, 2014; Saxton et al, 2015).

Multi-level modeling was utilized to gauge the importance of message-level emotion characteristics in the pass along behavior of a nonprofit tweet. Again, given that the tweets are nested within each nonprofit organization, the advantage of this approach is its ability to separate out the effects of the emotion-related messages characteristics from effects coming from the nonprofit organizations themselves. While other nonprofit social media research has ignored this (Saxton and Waters, 2014; Saxton et al 2015), it could be important if there are significant differences in retweets among the nonprofit organizations. Therefore, this research utilized a mixed modelling approach. The dispersion for the number of retweets was greater than would be expected for a Poisson distribution, as the variance was much larger than the mean. Therefore, generalized linear mixed models utilizing a negative binomial distribution were estimated using SPSS version 24.0. The model included a random intercept for the organizations and all other relevant variables were entered as fixed factors.

Chapter 6: Results

NONPROFIT ORGANIZATION AND MESSAGE CHARACTERISTICS

The final sample contained 288,906 tweets for the 95 organizations. The distribution of the organizations by sector was varied with the highest percentage of organizations in Human Services (27.9%) followed by Health (17.3%), Arts, Culture and Humanities (13.4%), International and Foreign Affairs (12.3%), Education (9.6%), Environment and Animals (7.1%), Public and Societal Benefit (6.9%), and Religion (5.6%). Table 8 illustrates various nonprofit Twitter characteristics by sector. This information for each organization in the sample can be found in Appendix A.

	Orgs.	Tweets in Sample	Followers		Friends		Days Since Account Creation		Number of Tweets in History	
	Count	Count	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Arts, Culture, and Humanities	12	38,681	1,730,683.0	2,197,411.3	16,013.9	33,111.2	2850.8	433.2	26,568.2	31,995.0
Education	9	27,695	294,209.9	632,243.8	1,308.2	755.4	2403.1	598.7	11,450.7	7,815.6
Environment and Animals	7	20,487	392,048.2	422,341.9	4,375.5	4,523.6	2626.3	510.3	14,393.9	8,449.7
Health	17	50,033	111,933.4	113,594.0	3,101.7	3,073.2	2606.7	502.1	13,601.2	9,292.8
Human Services	26	80,510	326,130.4	894,168.4	13,231.4	37,009.3	2426.2	649.2	12,629.4	10,531.4
International and Foreign Affairs	11	35,470	631,190.7	759,486.4	3,878.8	4,137.7	2715.3	644.2	14,168.7	8,563.5
Public and Societal Benefit	8	19,942	75,645.1	68,511.6	3,482.3	2,748.9	2375.1	742.7	12,379.3	7,011.6
Religion	5	16,088	222,628.2	301,487.5	12,998.7	14,555.2	2732.9	380.8	24,310.1	21,389.9
Total	95	288,906	493,102.2	1,122,338.0	8,244.6	24,009.7	2579.7	603.6	15,498.2	16,059.3

Table 8: Nonprofit Twitter Characteristics by Sector

Before turning attention to the primary focus of the emotional content and its effect on pass along behavior, it is important to first look at how the nonprofit organizations are utilizing Twitter's tools to form the foundation for relationship building and message dispersion. In Twitter, connections can be created when individuals or organizations choose to "follow" other individuals

or organizations. These connections do not require mutual consent to establish a connection (as is required for Facebook), and therefore, nonprofit organizations are able to quickly gather a huge follower network. Each nonprofit organization has both “followers” (other Twitter users who have elected to receive the nonprofit’s messages in their feed) and other Twitter users that they are themselves “following”. The number of followers gives an indication of the initial size of the audience for the messages the nonprofit sends and is of primary concern when the goal of the message is to push one-way communication to the organization’s followers. Overall, the nonprofits had an average of 493,102.2 followers, although it varied considerably from a low of 1,024 (Cross International) to a high of 6,994,481 (NPR). In contrast, the number of Twitter handles that the nonprofit is following can indicate the extent to which the nonprofit is interested in engaging in a two-way flow of communication, or at least creates the appearance that the organization cares what the community has to say. This friending behavior was also quite varied with a low of 112 (NY Public Library) and a high of 186,097 (American Cancer Society) ($M = 8,244.6$, $SD = 24,009.7$, $Median = 1,843.0$). Because the number of followers has been shown to effect pass along rates, it was included as a control in the analysis of the effect of emotion on pass along behavior.

Connections are also created within the actual Twitter messages themselves with user mentions and public messages. A user mention contains “@ [username]” anywhere except the beginning of the tweet and is primarily utilized to acknowledge another Twitter user. 44.4% of the tweets contained a user mention. In contrast, Public Messages (messages beginning with “[username]”) made up 11.7% of the sample. Tweets with Public Message indicate a deeper connection than with a user mention because its primary purpose is to either initiate a dialogue or respond to an existing conversation.

Additionally, the action of retweeting also forms a connection and represents a strong endorsement of the content of the tweet and/or the organization/individual who originally sent out the message. Overall, retweeted content made up 25.0% of the tweets that the organizations sent out

with a range within the sectors of 12.0% (Religion) to 36.9% (Environment and Animals). Environment and Animals organizations sent out more retweeted content and Religion organizations sent out less retweeted content. The Wildlife Conservation Society, Volunteers of America, Step Up for Students, PBS, and Planned Parenthood Federation of America all utilized retweeted content more than other nonprofits while Leukemia and Lymphoma Society of America and the New York Public Library utilized retweeted content much less.

		Retweet	Public Message	Original Content	Total
Arts, Culture, and Humanities	Count	9914	3561	25206	38681
	Percent	25.6%	9.2%	65.2%	100.0%
Education	Count	7681	2029	17985	27695
	Percent	27.7%	7.3%	64.9%	100.0%
Environment and Animals	Count	7563	1287	11637	20487
	Percent	36.9%	6.3%	56.8%	100.0%
Health	Count	12314	8925	28794	50033
	Percent	24.6%	17.8%	57.6%	100.0%
Human Services	Count	20778	11240	48492	80510
	Percent	25.8%	14.0%	60.2%	100.0%
International and Foreign Affairs	Count	7381	2439	25650	35470
	Percent	20.8%	6.9%	72.3%	100.0%
Public and Societal Benefit	Count	4703	1625	13614	19942
	Percent	23.6%	8.1%	68.3%	100.0%
Religion	Count	1934	2608	11546	16088
	Percent	12.0%	16.2%	71.8%	100.0%
Total	Count	72268	33714	182924	288906
	Percent	25.0%	11.7%	63.3%	100.0%

Table 9: Nonprofit Tweet Type by Sector

The distribution of the types of tweets (retweeted content, public messages, and original content) are shown in Table 9 by sector and this information for all organizations in the sample can be found in Appendix B. Original content made up the large majority of the tweets in each sector with Environment and Animals organizations sending out a higher proportion of retweeted content

and Religion organizations sending out less retweeted content. Additionally, nonprofit organizations in the Health and Religion sectors sent out the highest proportions of public messages.

Other message characteristics that have been associated with higher levels of engagement include the tweet length, use of photos, URLs, and hashtags. The average number of characters in the tweets was 121.0 (SD=27.7), which is much shorter than the 140 character limit imposed by Twitter. Over half of the sample of tweets contain hashtags and URLs with slightly less than half also including a user mention (“@[username]” anywhere except the beginning).

	Sample tweets	Number Characters		URLS	Photo	Hashtags	User Mentions
	Count	Mean	SD	%	%	%	%
Arts, Culture, and Humanities	38,681	126.1	23.6	64.6	31.7	44.6	38.1
Education	27,695	124.0	25.1	62.5	26.8	48.7	31.2
Environment and Animals	20,487	124.5	25.0	69.2	27.7	56.8	28.7
Health	50,033	117.4	28.8	53.2	18.1	64.6	32.8
Human Services	80,510	118.4	30.1	51.8	23.1	52.2	30.7
International and Foreign Affairs	35,470	125.2	24.7	64.2	24.2	57	27.6
Public and Societal Benefit	19,942	120.7	28.8	60.1	26.3	45.9	36.5
Religion	16,088	113.9	28.1	53.7	8.9	35.4	13.3
TOTAL	288,906	121.0	27.7	52.8	23.6	52.6	44.4

Table 10: Nonprofit Twitter Message Characteristics by Sector

There are a few sector-based differences in the usage of these message characteristics. For example, Health-related organizations use hashtags more often and Religion-related organizations using them less often. Additionally, Arts, Culture, and Humanities organizations and Public and

Societal Benefit organizations also tend to use user mentions more often, while Religion-based organizations tend to use them less often. Usage of these features along with other message-related characteristics are illustrated in Table 10 by sector and shown by organization in Appendix C.

In order to spread their messages beyond their immediate community of followers, nonprofits must rely on their followers to retweet their message. On average, nonprofits tweets received 40.8 retweets ($SD = 2,410.2$), with a minimum of zero and a maximum of 1,150,892 ($Median = 4.0$). Only 3.5% of the messages received more than 100 retweets. The ten tweets that received the most retweets are shown in Table 11.

Tweet Text	Retweet Count	Organization	Sector	Tweet Type
RT @ArianaGrande: broken. from the bottom of my heart, i am so sorry. i don't have words.	1150892	Make A Wish	Health	Retweet
RT @POTUS: It's been the privilege of my life to serve as your President. I look forward to standing with you as a citizen. Happy New Year!	268448	UNCF	Education	Retweet
RT @gatesfoundation: Don't have a red nose? That's ok! For every RT we'll donate \$10 toward ending child poverty. #RedNose4Kids https://t.c...	216406	Scholarship America	Education	Retweet
RT @gatesfoundation: Don't have a red nose? That's ok! For every RT we'll donate \$10 toward ending child poverty. #RedNose4Kids https://t.c...	216405	Feeding America	Human Services	Retweet
RT @gatesfoundation: Don't have a red nose? That's ok! For every RT we'll donate \$10 toward ending child poverty. #RedNose4Kids https://t.c...	216405	Boys & Girls Clubs of America	Human Services	Retweet
RT @gatesfoundation: Don't have a red nose? That's ok! For every RT we'll donate \$10 toward ending child poverty. #RedNose4Kids https://t.c...	216405	Catholic Medical Mission Board	International and Foreign Affairs	Retweet
RT @AreYouShook: My sister proposed to her GF today and look at that older woman's reaction https://t.co/iffI3mJNAr	112407	Art Institute of Chicago	Education	Retweet
RT @ACLU: Victory!!!!!! https://t.co/uyza3zrQsX	93657	Planned Parenthood Federation of America	Health	Retweet
RT @repjohnlewis: Never have I seen legislative action that reveals such clear disdain for the human dignity of the most vulnerable among u	73075	YWCA	Human Services	Retweet
RT @MichelleObama: Thanks @chancetherapper for giving back to the Chicago community, which gave us so much. You are an example of the power	72661	UNCF	Education	Retweet

Table 11: Top 10 Most Retweeted Nonprofit Twitter Messages

The nonprofit tweets that received the most retweets was not content that the nonprofit created, but rather content that the nonprofit had simply retweeted.

For tweets containing original content (rather than retweeted content), the average number of retweets was 19.6 and ranged from zero to 14,871 ($SD = 106.7$, $Median = 5.0$). Over half of the tweets containing original content were retweeted less than five times with 14.8% not receiving a single retweet. The top ten most retweeted messages for nonprofit tweets containing original content are shown in Table 12. Two of the top three retweeted tweets were sent by the Red Cross and three of the ten were sent by Save the Children.

Tweet Text	Retweet Count	Organization	Sector
Congratulations to the @stjude patients who just celebrated their kindergarten graduation. http://t.co/7YcCkwmDAM	14871	ALSAC / St. Jude Children's Research Hospital	Health
You can support #Moore response & other disasters by txting REDCROSS to 90999 to give \$10, or online at http://t.co/vPTDHZGzOI	14865	Red Cross	Human Services
Thanks to generosity of volunteer blood donors there is currently enough blood on the shelves to meet demand. #BostonMarathon	14657	Red Cross	Human Services
Rap trio @Migos make their #MetGala debut to celebrate #MetKawakubo in @Versace. #Migos https://t.co/xk8UzOhylw	11384	Metropolitan Museum of Art	Arts, Culture, and Humanities
All #refugee children deserve the chance for survival and a better future. RT if you agree. https://t.co/G3If9cPj6a... https://t.co/1fg3GhlQwU	10079	Save the Children	International and Foreign Affairs
Tian, giant panda at our @nationalzoo, does #snowzilla better than all of us #blizzard2016 https://t.co/6lXHXQF9QX	9419	Smithsonian Institution	Arts, Culture, and Humanities
Zeke made an important contribution for the @dallascowboys tonight. Can you contribute to the millions in need? https://t.co/q6T996H2jO	7706	Salvation Army	Human Services
We're desperately worried for those trapped in #Aleppo. Please help the innocent children caught in this warzone: https://t.co/C627Ixfzjo	7334	Save the Children	International and Foreign Affairs
Tag a girl who inspires you with #SheShines. For each tweet/RT, @ProcterGamble will donate \$1 to our programs that help girls live & learn!	5708	Save the Children	International and Foreign Affairs
These doors stay open. https://t.co/YqrMBnWfIM	5481	Planned Parenthood Federation of America	Health

Table 12: Top 10 Most Retweeted Nonprofit Twitter Messages

NONPROFIT EMOTIONAL INCLUSION IN TWITTER MESSAGES (RQ1)

The first research question sought to understand if nonprofits were utilizing emotion in their Twitter messages. Results indicate that nonprofit messages do include emotional appeals.

Specifically, 56.8% include at least one of the focal discrete emotions. Only 44.4% of public messages included at least one of the focal emotions while 55.7% of retweeted content and 59.5% of original content included at least one of our focal discrete emotions. The number of emotional words utilized ranged from zero to twenty-six, with 16.5% of messages including one emotion-related word, 10.5% including two, 9% including three, 7.7% including four, 4.5% including five, 3.2% including six, 2.1% including seven, and 1.4% including eight emotion-related words. Further information for each discrete emotion will be provided in later sections.

Overall, nonprofits most utilized trust and anticipation, while disgust was least utilized. This pattern holds true for both retweeted content and original content, and with public messages, anticipation and joy are utilized similarly. The negative emotions including anger, disgust, fear, and sadness are utilized to a lesser extent within public messages. This information is summarized in Table 13.

	Anger	Anticipation	Disgust	Fear	Joy	Sadness	Surprise	Trust
All	12.2	30.4	7.1	17.2	27.9	13.6	13.8	33.3
Retweeted Content	11.8	29.3	7.0	16.2	26.8	13.4	13.3	32.8
Public Messages	7.5	22.6	2.7	8.6	22.9	5.7	9.0	27.3
Original Content	13.1	32.2	7.9	19.1	29.2	15.1	14.8	34.6

Table 13: Percentage of Tweets Including Each Discrete Emotion by Type of Tweet

Trust, anticipation, and joy are the most utilized emotions across all sectors. Table 14 illustrates the percentages of tweets by sector that include each of the eight discrete emotions. Overall, the most commonly employed combination of two emotions were joy and trust (20.2%) and anticipation and joy (19.8%). Table 15 illustrates the percentages of tweets that included each emotional combination pair. Each emotion will be expounded upon below.

	Anger	Anticipation	Disgust	Fear	Joy	Sadness	Surprise	Trust
All	12.2	30.4	7.1	17.2	27.9	13.6	13.8	33.3
Arts, Culture, and Humanities	8.0	27.4	4.6	10.6	24.7	12.5	14.2	25.5
Education	7.4	29.9	4.2	11.1	28.1	10.0	13.3	33.4
Environment and Animals	12.9	30.6	4.9	16.7	20.3	8.0	10.5	32.1
Health	16.0	28.2	10.7	20.6	24.6	16.0	10.6	30.7
Human Services	12.8	30.9	7.6	17.3	28.7	13.1	14.2	33.7
International and Foreign Affairs	13.3	33.2	7.6	22.5	32.7	18.6	17.0	38.3
Public and Societal Benefit	11.4	29.4	5.5	15.9	28.0	11.7	13.7	35.5
Religion	12.8	36.8	7.8	22.1	40.3	15.9	18.4	45.0

Table 14: Percentage of Tweets Including Each Discrete Emotion by Sector

	Anger	Anticipation	Disgust	Fear	Joy	Sadness	Surprise	Trust
Anger		5.4%	5.4%	9.7%	4.3%	4.8%	3.6%	5.2%
Anticipation	5.4%		3.0%	8.1%	19.8%	5.9%	10.9%	18.1%
Disgust	5.4%	3.0%		5.8%	2.5%	5.7%	2.1%	3.2%
Fear	9.7%	8.1%	5.8%		6.1%	9.3%	4.5%	7.6%
Joy	4.3%	19.8%	2.5%	6.1%		5.2%	11.0%	20.2%
Sadness	7.3%	5.9%	5.7%	9.3%	5.2%		4.0%	5.9%
Surprise	3.6%	10.9%	2.1%	4.5%	11.0%	4.0%		9.0%
Trust	5.2%	18.1%	3.2%	7.6%	20.2%	5.9%	9.0%	

Table 15: Percentage of Tweets Including Combination of Two Discrete Emotions

Surprise

Words associated with surprise were used in 13.8% of the nonprofit tweets in the sample and included words like “luck”, “guess”, “pop”, and “sneak”. Of those tweets using surprise, 90.3% used only one surprise-related word, 8.9% used two, and .8% used between three and five surprise-

Organization	Tweet Text
Salvation Army USA	We hope and pray for the more than 100 injured in the #Hoboken train wreck , their families and the emergency response https://t.co/5sXRko9R8e
World Vision USA	I scream , you scream , we all scream for clean water! Thanks to a new water pump in Cambodia, everyone is smiling! https://t.co/b1somhaYZS
Scholarship America	We're excited to partner with @Itron at the @aga_naturalgas conference. One lucky raffle winner gets a Polaris ATV! http://t.co/hbd6aAESV9
Volunteers of America	Over the next 15 years, explosive growth of nation's senior population will present unprecedented challenges. https://t.co/sYwsYHHfZ6
Cross International	Waiting in line for a hot deal this Black Friday? Here is a deal so good , it changes lives :: http://t.co/xV92GF2i
Doctors w/o Borders	In Nigeria lies war-torn Borno State is a humanitarian catastrophe w/ 500K in urgent need of food/water/medical https://t.co/K8JrHR62uz
WHOI	RT @Havre2015: First look at the volcano for the MESH team! ROV Jason has found pumice and lots of it! #submarine #volcano # eruption http://...
ASPCA	Who wants a bonus chance to win!? We're going to do one more bonus question. Get ready! #SantaPaws
CARE	A devastating 7.8 earthquake has hit Ecuador. Donate now to help deliver urgent relief. https://t.co/c06ciKdGBp https://t.co/iqXyGA3unE
WCS	RT @WCS_Nigeria: Yankari's most infamous poacher and dangerous criminal, Baushe Bello, finally arrested! To face trial for the murder of a...

Table 16: Example Nonprofit Tweets Utilizing Surprise

Anticipation

Anticipation was the second most utilized emotion among the nonprofits, with anticipation-related words appearing in 30.4% of the nonprofit tweets in the sample. Words associated with anticipation that were utilized by the nonprofit organizations in their Twitter messages included words like “time”, “opportunity”, “risk”, and “hope”. Word cloud representations of the anticipation-related words are shown in Figure 3.



Figure 3: Word Cloud of Nonprofit Tweets Associated with Anticipation
Source: Created with wordcloud.com

Of those tweets using anticipation, 80.0% used only one anticipation-related word, 17.0% used two, and 3.0% used between three and six anticipation-related words within the tweet. Messages with anticipation-related words often also included words related to the other focal discrete emotions. Specifically, anticipation-related messages included other emotion-related words as follows: 65.3% joy, 59.7% trust, 35.8% surprise, 26.8% fear, 19.4% sadness, 17.9% anger, and 9.9% disgust. Example tweets for anticipation are illustrated in Table 17.

Organization	Tweet Text
Compassion International	Merry Christmas Eve! That means Christmas is tomorrow ! Spread holiday cheer today as you prepare for the coming of Christ #MakeitMore https://t.co/8dn4zNhH0r
Scholarship America	This fall is an exciting time to volunteer with us - and our annual conferences are a perfect learning opportunity ! http://t.co/BXOhraa6UT
MAP International	It's hard to see hope in the midst of the rising death toll. @Berehualk has found that #hope thank you! http://t.co/ZOtYWLj1Aj @nytimes
Step Up For Students	I am excited and hopeful to see how PLSAs will help my daughter find her perfect path to success Julie, Longwood FL http://t.co/1HbFLNBpwL
Toys for Tots	The wait is finally over! @UPS's #WishesDelivered is back and more magical than ever. Watch and share: https://t.co/TdpCuanWL8
World Wildlife Fund	RT @johnagallo: Can technology save the planet? Livestream in progress : https://t.co/sEI0SZxWlj needed: optimism, progress, and caution . #...
The YMCA	RT @AAPPres: "Our vision for youth development must be all-encompassing: it's a cradle to a career path" @ymca Dr. Longjohn #everychildneeds
Harlem Children's Zone	#GivingTuesday is fast approaching ! Make a gift to help our kids stay on track to #success http://t.co/H30RucfrOd http://t.co/CfCG4c2JxT
Mercy Corps	Thousands of ppl are expected to be evacuated from #Aleppo in the coming days. We're ready to meet urgent needs: https://t.co/KL9Tq9r7QV
Smithsonian	@Breedy_93 So glad you're enjoying #Sidedoor! Can't wait to bring you another episode tomorrow .

Table 17: Example Nonprofit Tweets Utilizing Anticipation

Joy

Joy was also frequently utilized with 27.9% of nonprofit tweets including joy-related words. Words associated with joy that are utilized by the nonprofit organizations in their Twitter messages are shown with word cloud representations in Figure 4 and include words like “happy”, “friend”, “thankful”, and “love”.

Organization	Tweet Text
Boys Town	To those celebrating , we wish you and those you love a joyous and peaceful Hanukkah! May your celebration be bright and filled with cheer .
National Jewish	Eat #chocolate ! DYK eating chocolate can improve your #mood ? Here are more tips to increase #happiness . https://t.co/pYIRXJomLB
Catholic Charities USA	Today, The Church celebrates the feast day of St. Valentine, who was the patron saint for love , young people and happy marriages.
Compassion International	@MikeRadovanovic We love that too! What a sweet, sweet child you have! -Sarah
Susan G. Komen	RT @NancyGBrinker: Wishing my friend @hodakotb a very happy and healthy birthday ! She has been a inspiration to so many of us at .@SusanGKo
Catholic Charities USA	RT @cathcharitiesNO: Happy Mardi Gras from all of us here at CCANO! We hope you have a happy, safe & fun -filled day with friends & family!
American Red Cross	@benitawheeler *clap* *clap* *clap* We love our volunteers!
Lincoln Center	Join @NYChoral for an evening of festive family- friendly music and a sing -along of traditional carols. https://t.co/cFYoX4NSgg
ASPCA	A graduate from our kitten nursery , Conor a.k.a "Nugget" is now in his perfect home! Read his happy tail here: https://t.co/2L7ICGn1eV
Boys Town	Everyone at Boys Town has a story - A story of hope, triumph and success . Our success lies in their stories: https://t.co/sZjCspJHTK

Table 18: Example Nonprofit Tweets Utilizing Joy

Sadness

Sadness was relatively less utilized with only 13.6% of nonprofits using sadness-related words within their tweets. Words associated with sadness that were utilized by the nonprofit organizations in their Twitter messages are shown with word cloud representations in Figure 5 and included words like “cancer”, “poverty”, “disaster”, and “lost”. Of the tweets that included sadness, 86.4% included one sadness-related word, 11.8% included two, and 1.8% included between three and six sadness-related words. For messages that included sadness, other discrete emotions were also present including fear (68.5%), anger (53.9%), anticipation (43.3%), disgust (42.1%), joy (38.2%), and surprise (29.5%). Example tweets for sadness are illustrated in Table 19.

Anger

Like sadness, anger was relatively less utilized with only 12.2% of nonprofits using anger-related words within their tweets. Nonprofit organization expressed anger through words like “fight”, “shout”, “violence”, and “battle”. Words associated with anger that are utilized by the nonprofit organizations in their Twitter messages are shown with word cloud representations in Figure 6.

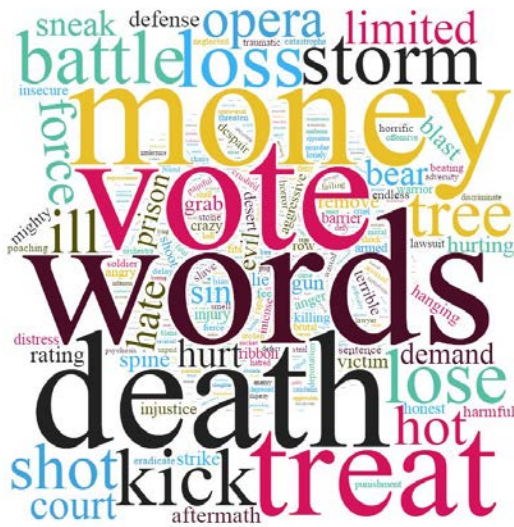


Figure 6: Word Cloud Nonprofit Tweets Associated with Anger

Source: Created with wordcloud.com

87.2% of the messages included one anger-related word, 11.4% included two, and 1.4% included between three and five anger-related words. Nonprofit messages expressing anger also included fear (79.8%), sadness (60.3%), disgust (44.8%), anticipation (44.6%), joy (35.2%), and surprise (30.0%). Example tweets for anger are illustrated in Table 20.

Organization	Tweet Text
World Wildlife Fund	New regulations fight back against criminals that steal from the sea, keeping illegal fish out of the U.S. market. https://t.co/IwbtmHKKku
YWCA USA	5 years after the death of #TrayvonMartin, we must continue to fight for racial justice, to dismantle white supremacy & end state violence .
NPR	Some worry the GOP bill will let insurance companies deny coverage for health care tied to a rape victim's assault https://t.co/uLAWgtE2p7
Save the Children US	34,000 people are forcibly displaced daily. All the refugees & forcibly displaced make up 21st largest country. @carolynsave #UNPSF
Mental Health America	A3 Microaggressions are subtle acts of discrimination and oppression that often go unrecognized, creating a feeling of alienation #PFYChat
YWCA USA	RT @NOMOREorg: A1 Domestic violence & sexual assault survivors rely on federally-funded services like shelter, rape crisis services & more!...
Mercy Corps	After years of fear and violence under #BokoHaram, 1.8M people are displaced in NE #Nigeria. Here are their stories:... https://t.co/SGVwjVqSUN
IRC International Rescue Committee	Aleppo hasn't just been a sight of terrible death . It's been a destruction of basic intl law @DMiliband @NewsHour: https://t.co/LuoDI0dDgM
American Bible Society	Don't be angry or furious . Anger can lead to sin . Psalm 37:8 https://t.co/g2upu8sePL
American Cancer Society	What will it take to ensure all people have an equal shot at fighting back against #cancer ? http://t.co/O16yeHTI5t http://t.co/IQP0ksbhap

Table 20: Example Nonprofit Tweets Utilizing Anger

Fear

Fear was the most used of the negative emotions examined, with 17.2% of nonprofit tweets expressing fear. Tweets expressing fear included words such as “risk”, “emergency”, “death”, and “worry”. Words associated with fear that were utilized by the nonprofit organizations in their Twitter messages are shown with word cloud representations in Figure 7.



For the nonprofit tweets expressing fear, 82.0% contained one fear-related word, 15.2% contained two, while 2.8% contained between three and six fear-related words. Some of these messages also expressed anger (56.5%), anticipation (47.5%), trust (44.2%), joy (35.6%), disgust (33.9%), and surprise (26.3). Example tweets for fear are illustrated in Table 21.

Organization	Tweet Text
YWCA USA	Trans youth already have an extremely high risk for violence , discrimination , and suicide . https://t.co/QiMfq1pH5Z
IRC Intern'l Rescue Committee	Global threats like Ebola grow out of poverty , instability & bad governance. How cutting foreign aid could hurt U.S: https://t.co/96na8tkABn
NPR	Some worry the GOP bill will let insurance companies deny coverage for health care tied to a rape victim's assault https://t.co/uLAWgtE2p7
American Heart Association	ICYMI: Gum disease , tooth loss may increase risk of death in older women. #AHANews https://t.co/njIJn1dJUi https://t.co/JSIrIOYUQ4
Susan G. Komen	A1: #breastcancer is the most common cancer among Latinas & remains the leading cause of cancer death in Latinas. #SaludTues
Planned Parenthood	RT @Latinos4PP: #SCOTUS tie perpetuates state violence imposed on immigrant families, placing millions at risk of detention & deportation .
Doctors w/o Borders	@kevinsieff from @washingtonpost reports on Nigerians displaced by violence , now facing extreme risk of starvation . https://t.co/AzW07pY9Kj
CBN News	#NorthKorea says the government will react to "a total war " with the #UnitedStates with a nuclear war . https://t.co/1Dg6Z0WODi
Catholic Charities USA	RT @Refugees: Every 1 minute, 24 people are forced to flee their homes because of war or persecution . Please stand #WithRefugees. https://t.co/...
Salvation Army USA	Every day in America, 114 people die as a result of drug overdose, 205 die of alcohol abuse . We want to change this https://t.co/zmZSVV18Gf

Table 21: Example Nonprofit Tweets Utilizing Fear

Trust

Trust was the most expressed emotion in nonprofit tweets with 33.3% of the tweets being associated with trust. Nonprofit organizations used words like “supporting”, “team”, “safe”, and “provide” to express trust. A word cloud representation is shown in Figure 8 to illustrate the words associated with trust that were utilized by the nonprofit organizations in their Twitter messages. Of these messages, over three quarters (76.7%) used only one trust-related word, with 19.1% using two, and 4.2% using between three and eight trust-related words. Nonprofit messages expressing trust also expressed joy (60.8%), anticipation (45.5%), sadness (27.0%), fear (22.8%), anger (15.8%), disgust (9.6%) , or. Example tweets for trust are illustrated in Table 22.

Disgust

Disgust was the least utilized emotion among our focal emotions with only 7.1% of nonprofit tweets expressing disgust. Words associated with disgust that are utilized by the nonprofit organizations in their Twitter messages include “disease”, “waste”, “malaria”, and “failure”. These and other disgust-related words that were utilized by nonprofit organizations in their Twitter messages are shown in a word cloud representation in Figure 9. Overwhelmingly, tweets expressing disgust included just one disgust-related word (91.6%), with only 7.7% using two, and 0.7% using between three and five disgust-related words. Other discrete emotions that were expressed along with disgust include fear (82.3%), sadness (80.8%), anger (77.0%), and trust (45.0%), anticipation (42.4%), joy (34.8%), and surprise (29.1%). Example tweets for disgust are illustrated in Table 23.



Figure 9: Word Cloud Nonprofit Tweets Associated with Disgust
Source: Created with wordcloud.com

Organization	Tweet Text
Dana-Farber	While # cancer itself generally isn't contagious , an array of cancer -causing bacteria and viruses are. https://t.co/ynBcoKUGPb
CBN News	RT @JenniferWishon: Those who deny the holocaust are an accomplice to evil ...we will never be silent in the face of evil again- @POTUS #Hol...
CARE	Thousands are homeless after the #EcuadorEarthquake, making them vulnerable to dirty drinking water & disease . https://t.co/DvZdrLr1gz
National Jewish	New studies say #ecigarette #vaping puts toxic chemicals in #lungs, makes # bacteria harder to kill http://t.co/piwihCNwxi #MRSA # nicotine
World Wildlife Fund	RT @WWFnews: Kenya sets blaze to 100+ tons of ivory in historic show of intolerance for elephant poaching and ivory trade https://t.co/Je81...
Feeding America	21% of landfill volume is food waste . Help us reduce food waste and get involved today: https://t.co/JiG3ZRIq7a https://t.co/5zvseJEXB0
ASPCA	Seven-year-old Shepherd-mix, She-ra, gave her pet parent a nasty surprise when she ate a container of powerful glue https://t.co/zMex6CS4r7
NPR	The admiral was sentenced to 18 months in prison for lying to federal authorities in massive bribery , fraud scandal https://t.co/WhmWcUDnyo
CBN News	RT @JenniferWishon: "This year, [Ramadan] begins as the world mourns the innocent victims of barbaric terrorist attacks in the United Kingdom
American Cancer Society	RT @RelayForLife: Takes A Minute To Donate - Donating helps those fighting the nasty disease that is cancer . https://t.co/73C7oVBVb8 https://t.co/73C7oVBVb8

Table 23: Example Nonprofit Tweets Utilizing Disgust

EFFECT OF EMOTION ON PASS ALONG BEHAVIOR (RQ2)

Count of Tweet Retweets

To gauge the association of the discrete emotions found within the nonprofit Twitter messages and pass along behavior, multi-level modeling utilizing the negative binomial distribution with a log link function was employed on the 182,924 nonprofit Twitter messages containing original content. Overall the model was significant, $F(80, 182,906)=460.765$, $p<.001$). The results of the model are shown in Table 23.

	Coefficient	Exp(Coefficient)	t	Sig.
Intercept	-0.173	.841	-1.079	.281
Number of Followers	0.000	1.000	4.663	.000
Number Tweets in History	0.000	1.000	0.734	.463
Days on Twitter	0.000	1.000	40.005	.000
Number Characters in Tweet	0.006	1.006	37.740	.000
Number User Mentions	-0.062	0.939	-12.316	.000
Photos Usage	0.413	1.511	49.979	.000
Number Links	-0.205	0.815	-24.354	.000
Hashtags Usage	-0.032	0.968	-4.255	.000
Anger	0.009	1.009	0.777	.437
Anticipation	-0.056	0.946	-7.946	.000
Disgust	0.028	1.028	1.877	.060
Fear	0.062	1.064	6.566	.000
Joy	0.008	1.008	0.998	.318
Sadness	0.043	1.044	4.179	.000
Surprise	0.021	1.021	2.072	.038
Trust	0.054	1.055	8.890	.000

Table 23: Fixed Coefficients for Negative Binomial Mixed Model of Retweet Counts

The results indicate that anticipation, fear, sadness, surprise, and trust all have a significant association with retweet counts, while anger, disgust, and joy do not. Anticipation was the only emotion-related variable to have a negative correlation with retweet rate. In contrast, fear, sadness, surprise, and trust all had a positive association with retweet rates. The results indicate that nonprofit messages that utilized fear, sadness, surprise, or trust are positively associated with pass along behavior. Nonprofits may be able to employ these types of appeals to extend the reach of the messages and see their messages spread further. In contrast, use of anticipation-related words had a negative association with pass along behavior. Thus while it is currently the second most utilized emotion, it should be used cautiously.

All of the control variables were significant as expected with the exception of the number of tweets the organizations have in their history with Twitter. Interestingly, the number of links, the number of user mentions, and hashtag usage had a negative relationship with retweet rates.

Count of Tweet Likes

While not the primary focus, a negative binomial mixed model was also run for the count of likes the tweet received, for comparison with pass along behavior. The results are shown in Table 24.

	Coefficient	Exp(Coefficient)	t	Sig.
Intercept	-2.565	0.077	-14.156	.000
Number of Followers	0.000	1.000	3.507	.000
Number Tweets in History	-0.000	1.000	-0.356	.722
Days on Twitter	0.002	1.002	125.426	.000
Number Characters in Tweet	0.006	1.006	34.864	.000
Number User Mentions	0.017	1.017	3.252	.001
Photos Usage	0.502	1.652	59.828	.000
Number Links	-0.300	0.741	-34.924	.000
Hashtags Usage	-0.050	0.952	-6.370	.000
Anger	0.029	1.029	2.381	.017
Anticipation	-0.055	0.947	-7.676	.000
Disgust	0.007	1.007	0.454	.650
Fear	0.014	1.014	1.427	.154
Joy	0.054	1.055	6.790	.000
Sadness	-0.019	0.981	-1.790	.073
Surprise	0.021	2.076	1.021	.038
Trust	0.060	1.062	9.762	.000

Table 24: Fixed Coefficients for Negative Binomial Mixed Model of Likes Counts

The same control variables remain significant with the number of links and hashtag usage having a negative relationship with likes. The inclusion of anger, anticipation, joy, surprise, and trust have a significant association with likes, while disgust, fear, and sadness are not significant.

As was the case with retweet rates, anticipation is significant with likes and has a negative association. Additionally, surprise and trust have significant correlations with both retweets and likes

and disgust did not have a significant association with either. However, anger and joy are significant with likes, but not with retweet rates. Additionally, while sadness was significant with retweet rates, it was not significant with likes. These findings and their implications are discussed in the next chapter.

Chapter 7: General Discussion

Tremendous growth in social media usage has affected the way the public talks to each other and the way that nonprofit organizations communicate with their supporters, donors, stakeholders, and clients. Through its tools and features, Twitter facilitates the rapid real-time dissemination and exchange of message and retweeting has become a popular means for information diffusion (Boyd, Golder, and Lotan, 2010; Suh, Hong, Pirolli, and Chi, 2010). Twitter combines news media and social networking features that make it particularly attractive to nonprofit organizations. Microblogging is becoming an increasingly important part of communication strategies of many nonprofit organizations.

Social media has the ability to facilitate nonprofits in increasing general awareness, reaching existing networks of clients and supporters, expanding their network of supporters, and building online communities. Microblogging sites like Twitter provide an environment where nonprofit organizations can foster relationships and develop online communities of supporters, and it opens up the possibility to engage in a more interactive relationship with their supporters in ways that are not as easily facilitated offline. This can potentially move supporters into action in a way that other communication channels have not able to generate. This, coupled with the relatively low-cost nature of social media, make it particularly attractive to nonprofits, and as such social media is increasingly playing a larger role in nonprofit integrated marketing communication. Social media networks now provide an opportunity for nonprofits to use emotional expressions in their social media messages to both nurture a desired brand image and build a community of supporters through the collection of shared emotional experiences.

However, nonprofit marketers have been criticized for not utilizing social media to its full potential, instead using it primarily to distribute information rather than to fully connect and engage with their audiences (Guo & Saxton, 2014, Lovejoy et al., 2012; Waters et al., 2011). Evidence of this missed opportunity to engage in deeper conversation and community building with their publics

was found in this research, with only 11.7% of the nonprofit messages engaging in dialogue with their community members through public messages. Nonprofit firms should not only be focused on pushing communications out to their community of supporters, but also actively listening and responding to their audience, with the organizations and their audiences jointly involved in the co-creation of the brand narrative (Singh and Sonnenburg, 2012; Schultz and Peltier, 2013; Barger, Peltier, and Schultz, 2016).

This research indicates that nonprofits are including at least one of the eight focal discrete emotions in over half (56.8%) of their Twitter messages and are most utilizing trust, anticipation and joy. Trust is an integral element of social life and a public's trust in a nonprofit organization is essential for both its ability to fulfil its missions and its longevity. It is, therefore, logical that trust is the most utilized discrete emotion by top nonprofits with a third of the messages referencing this emotion. Because affective trust facilitates social bonding, nonprofit organizations should also be able to utilize affective trust appeals to grow or deepen the relationship with their community members. By messaging to trust in its social media messages, nonprofits are able to reaffirm and strengthen the bond with their brand community and with the public more generally.

Anticipation was the second most utilized emotion, with slightly less than a third (30.4%) of nonprofit Twitter messages including anticipation-related words. Nonprofits primarily utilize anticipation to get their community of supporters excited about a future event, or the future more generally when its mission is fulfilled. This allows their community to look forward to the experience and it may result in an amplification of emotional reaction (Wilson, Ceterbar, Krermer, and Gilbert, 2005) when the event actually occurs. Nonprofits are able to utilize anticipation in their Twitter messages to build a sense of excitement towards the future.

Joy was also frequently utilized with about 28% of messages include joy-related words. Joy's high activation level (Averill and More, 2000; Ellsworth and Smith, 1988) and forward action tendency (Roseman, 2001), coupled with brand image and impression management concerns make

joy a popular emotion for nonprofit Twitter messages. Given that joy decreases psychological distance (De Rivera, Possell, Verette, and Weiner, 1989), and increases helpfulness and cooperation (Oatley and Jenkins, 1996), nonprofits are able to utilize joy to help build their community of supporters and bring their community together to further their cause.

Of the negative emotions, fear was most utilized - but at a much lower rate than trust, anticipation and joy – with 17.2% of nonprofit messages including fear-based words. Fear orients attention to the present (Tooby and Cosmides, 2008; Langer, Wapner, and Werner, 1961) to assist in identifying and assessing the threat contained in the message and creates a readiness for reaction (Blandard et al, 2011; Griskevicius, Goldstein, Mortensen, Sundie, Cialdini, and Kenrick, 2009, Ohman and Mineka, 2001; Phelps and LeDoux, 2005). As such, nonprofits are able to tap into that threat management system to grab users' attention, instill fear and offer instructions for warding off the threat. As with fear-based appeals in other media, utilizing fear appeals in Twitter messaging may enable nonprofits to successfully further their cause and induce change.

Nonprofits utilized the other negative emotions of anger, sadness, and disgust less, with disgust being least utilized. Messages containing sadness-related words and messages containing anger-related words occurred in similar proportions with 13.6% and 12.2% of messages containing these emotions respectively. While anger is associated with highly focused attention and a desire to strike out or seek revenge, sadness motivates problem solving by turning attention inward for possible solutions or by seeking help from others (Izard, 1977, 1993). In contrast, disgust creates a desire to distance oneself from the offending object (Lazarus, 1991) and has a strong reflexive avoidant nature. Therefore, it is not surprising that nonprofits utilize disgust relatively infrequently (7.1%). The under reliance on all negative emotions by nonprofits in their Twitter messages (23.9%) may reflect an understanding that while negative emotions can be successfully utilized to further nonprofit missions, continued usage of negatively valenced content could have a negative effect on brand image.

Like the negative emotions, nonprofits also utilized surprise fairly infrequently, with only 13.8% of messages containing surprise. Arguably, overusing surprise would likely undermine its effects, so the infrequent use of surprise by nonprofits may not be particularly noteworthy. However, when sparingly utilized, the disruptive effect of surprise that results from the perception of novelty can orient attention toward the message and motivate the readers to engage in a specific action (Frijda, 1986; Oatley, 1992; Roseman et al, 1994; Scherer, 1984; Rime, 2009; Weick, 1995; Plutchik, 1980). This may be particularly helpful in the crowded environment of social media messages.

Not only do emotions play an important role in attitude formation (Edell and Burke, 1987; Royo-Vela, 2005), viral marketing literature suggests that the manner in which a message is crafted can influence pass along behavior (Berger & Milkman, 2011, Dobeles et al, 2007; Eckler & Bolls, 2011; Nelson-Field, Riebe, and Newstead, 2011). Messages containing emotion are more likely to be forwarded. Understanding the relationship between emotional inclusion in nonprofit social media messages and pass along behavior better positions nonprofit organizations to spread information, build communities, and mobilize supporters.

This research found that utilizing emotive language in nonprofit Twitter message is associated with pass along behavior. Nonprofits should be aware of the language they are using so that they can appropriately employ emotion in their Twitter messages and have their messages successfully spread. However, not all emotions are equally helpful in encouraging pass along behavior and the level of success will vary depending on which discrete emotion is employed. Specifically, the data indicate that surprise and trust, and two negative emotions, namely fear and sadness, are both positively associated with pass along behavior and may be successfully employed to encourage pass along behavior.

Surprise being influential corroborates other viral marketing literature which has identified it as potentially being influential in pass along behavior (Libert and Tynski, 2013; Lindgreen and Vanhamme, 2005; Dobeles et al., 2007). However, this is the first time this emotion has been tested

in Twitter messages for the nonprofit sector and our results indicate that surprise may also be successfully utilized in nonprofit tweets to encourage pass along behavior. Additionally, using surprise can also encourage community members to “like” the tweet as well. In contrast, trust has not been previously investigated in eWOM or viral marketing literature. While it is known that establishing trust is central to nonprofits’ purpose and essential for performance, the ability for the nonprofit to message to trust and possibly have their message spread is encouraging. Additionally, messaging to trust also is associated with community members “liking” the tweet as well.

While fear is one emotion that has received extensive attention in prior literature, it has not been thoroughly examined with respect to pass along rates. This research indicates that nonprofit utilization of fear appeals is associated with increased pass along behavior. Fear is associated with a heightened autonomic nervous system and is accompanied by a feeling state of high tension and activity (Izard, 1991). This creates tunnel vision toward the fear-provoking message, increasing attention and creating a readiness to act. As such, it is logical that usage of fear by nonprofits is associated with pass along behavior. However, this readiness to act does not translate into “likes” for nonprofit Twitter messages containing fear-related textual content.

The significant positive relationship between sadness and pass along behavior is somewhat unexpected given the low arousal level of the emotion combined with impression management concerns. Additionally, other prior research has indicated that sadness was not associated with an increase in retweet rates (Kim and Yoo, 2012; Fan, Zhao, and Chen, 2013). However, given the context of the research is nonprofit messages, the results of this research indicate that nonprofits can use sadness to elicit sympathy and have their messages spread. It is interesting to note, however, that usage of sadness did not have a significant association with the tweet receiving “likes”.

While anticipation was the second most utilized emotion among nonprofits, it actually has a negative correlation with pass along behavior. This is also somewhat unexpected, as other prior research in viral videos had identified emotions related to surprise and anticipation (i.e. curiosity,

interest, amazement, astonishment, and uncertainty) as being highly prevalent (Libert and Tynski, 2013). However, it is possible that building anticipation through videos has a different effect than using anticipation in textual messages on social media. This research also indicates that usage of anticipation also has a negative relationship with tweet “likes” as well. Therefore, while anticipation can fulfil the goal of getting their community excited about an upcoming event, it should not be utilized if the goal is to encourage pass along behavior or “likes”, as doing so may have a detrimental effect. However, given the nonvalenced nature of the anticipation, future research should investigate whether this is true for both polarities.

Interestingly, the inclusion of disgust, anger and joy did not have significant association with pass along behavior. Given the associated impulse of disgust to distance oneself from the offending object, we might expect a lack of significance (or perhaps a negative relationship) of disgust with pass along behavior and with “liking” the tweet. However, non-significance of anger and joy with pass along behavior is a bit more surprising. Anger is associated with highly focused attention and is unique among the negative emotions in that it has a forward action tendency (Arnold, 1960; Averill, 1983; Frijda, 1986). Additionally, the inclusion of anger in messages has been associated with a wider message dispersion than other negative emotions in other prior research (Fan, Zhao, and Chen, 2013; Kim and Yoo, 2012). Similarly, joy is associated with heightened likelihood of approach behavior (Davidson, 1992), a high activation level (Averill and More, 2000; Ellsworth and Smith, 1988), and broadening scopes of attention and cognition (Federickson and Branigan, 2005). This combined with favorable impression management implications make joy seem a priori a logical choice. However, these results suggest to nonprofits that joy and anger are not associated with pass along behavior. However, the association of joy and anger with the tweet receiving “likes” is significant. Therefore, while the usage of these emotions is not associated with pass along behavior, each can be utilized to encourage tweet “likes”. While this form of engagement is not generally

perceived to be as deep and thus not as desirable as a retweet, tweet likes also help extend the reach of the message, which can be of value to nonprofits.

CONTRIBUTIONS AND IMPLICATIONS

Prior research has established that emotional content is important in message virality and messages containing emotion are more likely to be forwarded. However, if and how nonprofits were utilizing emotion in their Twitter messages was unclear and how usage of emotion is associated with pass along behavior of nonprofit messages had yet to be investigated. Using Social Sharing of Emotion (Rime Finkenauer, Luminet, Zech, and Philippot, 1998; Rime 2009) as the theoretical foundation, this dissertation specifically examined nonprofit usage of emotion and its relationship with pass along behavior. By assembling and analyzing a large data set of over two hundred thousand nonprofit Twitter messages, this research creates a baseline, summarizes the current usage of eight discrete emotions by top nonprofits in their Twitter messages, and takes a first step to investigate the association between these discrete emotions and pass along behavior. Additionally, while a larger amount of research exists on factors that are associated with retweeting from individual level, less is known regarding tweets that originate from organizations. This is of particular interest in that while organizations are not in control regarding how their messages are shared, they do have control regarding the content of the message.

Results indicate that nonprofits are using emotional content in their Twitter messages to communicate with their public. Nonprofits are primarily utilizing trust (33.3%), anticipation (30.4), and joy (27.9%), but also utilize fear (17.2), surprise (13.8%), sadness (13.6%), anger (12.2%), and disgust (7.1%) to a lesser extent. Additionally, results indicate that using emotive content in nonprofit Twitter messages is correlated with pass along behavior. Specifically, results indicate that nonprofit messages that utilized fear, sadness, surprise, or trust were positively associated with pass along behavior. In contrast, use of anticipation-related words had a negative correlation with pass along

behavior. Therefore, while it is currently the second most utilized emotion, it should be used cautiously.

LIMITATIONS AND FUTURE RESEARCH

Although a large sample of tweets were collected from a variety of types of nonprofit organizations and included a wide range of sectors, one could argue that the sample is not large enough in every sector to be representative. Future research should examine whether differences exist in how various sectors utilize discrete emotion and if the effect that each emotion has on pass along behavior varies by sector. Further, the sample examined the Twitter messages of the top 100 U.S. nonprofit organizations. It is unknown whether the results would hold for smaller nonprofits or for nonprofits outside the U.S.A. Additionally, this research examined nonprofit usage of emotion in Twitter messages specifically. However, people have different motivations and expectations for using and interacting with content on various social networking platforms and it is likely that organizations utilize various social networking platforms to meet varying needs and objectives. Future research should examine emotional inclusion on other social network platforms content such as Facebook, Instagram, and YouTube to see if similar pass along behavior is experienced. This research also focused specifically on emotion in text. Future research should also investigate emotion expressed through emoticons and through photo or video-based content. Additionally, this research focused on the associations between discrete emotions and pass along behavior. Future research should investigate the relationships between the discrete emotions and other outcomes (i.e. comments). While this research forms a foundation by looking at eight basic discrete emotion, future research should investigate other discrete emotions (i.e. empathy or guilt), specific emotional

combinations (i.e. surprise and joy), and if the ordering or flow of emotions have an influence on pass along behavior (i.e. anticipation followed by surprise and then joy). Additionally, this research investigated the association of emotion in firm-generated messages with pass along behavior, while future research should investigate if these findings also hold with user-generated brand content. Furthermore, this research relied on automatic labeling of the discrete emotions rather than human coding. While this approach allows much larger volumes of data to be analyzed in a short period, it also comes with limitations including possible decreases in accuracy since context cannot be taken into account. Lastly, given the observational nature of the data, we cannot infer causality. Follow-up experiments should be conducted to better test for causality and to rule out alternative explanations.

CONCLUSION

Social media allows the opportunity for researchers to observe in real-time the relationship between an organization's messaging and the reactions of the public. However, prior nonprofit social media research has primarily focused on describing the content of the messages rather than examining the reactions to the message. Electronic word-of-mouth and viral marketing literature suggests that the manner in which a message is crafted can influence pass along behavior and prior literature on pass-along behavior shows that messages containing emotion are more likely to be forwarded. However, research regarding the extent to which nonprofits use discrete emotions in social media communications is quite limited. Using Social Sharing of Emotion (Rime Finkenauer, Luminet, Zech, and Philippot, 1998, Rime 2009) as a theoretical foundation, this research begins to address this gap by investigating the relationship between Plutchik's (1980) eight discrete emotions and pass along behavior of nonprofit tweets.

Appendices

APPENDIX A: NONPROFIT ORGANIZATION TWITTER CHARACTERISTICS

	Tweets in Sample	Followers	Friends	Days Since Account Creation	Number of Tweets in History
Alzheimer's Assoc.	3,206	111,736	3,097	3,028	26,211
American Cancer Soc	3,242	933,906	186,097	3,348	6,708
American Heart Assoc	3,226	230,277	5,704	2,696	31,198
American Kidney Fund	3,228	11,265	1,437	2,907	5,730
American Red Cross	3,207	4,499,760	39,876	3,653	5,207
AmericanBibleSociety	3,207	11,544	3,346	2,980	6,479
AMNH	3,217	299,943	867	3,161	11,716
Art Institute	3,242	266,454	1,521	3,025	10,525
ASPCA	3,199	400,745	12,883	3,291	30,189
BBBS	3,240	15,974	3,303	3,012	4,646
Boy Scouts - BSA	3,110	66,542	287	3,032	3,115
Boys & Girls Clubs	3,198	36,835	1,188	2,982	8,815
Boys Town	3,239	8,748	440	2,371	5,781
CARE (care.org)	3,240	1,256,815	1,746	3,149	27,569
Catholic Relief	3,249	66,507	13,489	3,328	13,962
CatholicCharitiesUSA	3,223	24,404	563	3,120	6,927
CBN News	3,224	61,708	3,637	2,994	65,020
ChildFund	3,244	23,386	4,385	3,129	15,329
Clinton Foundation	3,220	749,466	787	2,815	8,299
CMMB	3,236	17,699	807	2,962	3,900
CommunitiesInSchools	3,231	10,889	1,308	2,994	7,599
Compassion Intl	3,219	221,839	17,052	3,545	25,232
Conservation Fund	3,216	5,755	1,253	3,098	10,760
Cross International	1,662	1,025	414	2,906	1,675
Cru	3,227	13,121	1,151	2,904	8,954
Dana-Farber	3,197	64,138	10,243	3,260	27,294
Direct Relief	3,219	90,136	2,953	3,040	8,701
Doctors w/o Borders	3,244	951,470	1,212	3,308	20,872
Ducks Unlimited	3,207	115,566	551	3,239	6,870
Feed the Children	3,232	22,743	6,410	3,113	9,968
Feeding America	3,217	282,012	42,444	3,160	11,626

Food For The Poor	3,243	94,877	7,737	3,014	10,556
Fred Hutch	3,236	18,231	2,996	3,161	17,177
Girl Scouts	3,245	72,011	2,287	2,703	29,488
Good360	3,238	5,416	2,770	2,892	4,315
Goodwill Industries	3,224	28,644	656	3,102	6,699
Habitat for Humanity	3,240	762,910	5,702	2,965	23,126
HarlemChildren'sZone	1,514	10,853	203	2,297	1,515
IRC Intl Rescue Comm	3,245	361,751	2,509	3,019	16,664
JDRF	3,170	52,907	1,812	3,019	9,997
Jewish United Fund	1,916	2,522	368	2,734	1,916
Lincoln Center	3,246	94,994	1,260	2,970	10,853
LLSusa	3,244	19,443	1,059	3,344	8,065
Make-A-Wish America	3,209	219,957	10,248	2,864	28,741
MAP International	3,238	2,597	2,444	3,088	3,848
MentalHealthAmerica	3,228	195,453	2,298	2,938	8,939
Mercy Corps	3,218	237,293	833	3,158	10,005
Metropolitan Opera	3,244	204,078	306	3,013	4,937
MFAH	3,205	44,735	1,299	3,105	14,144
Museum of Modern Art	3,222	4,778,512	3,384	3,281	10,874
National Jewish	3,228	2,190	614	3,085	5,844
National MS Society	3,233	55,583	387	3,011	3,850
Natl Gallery of Art	3,238	207,221	597	2,893	9,972
Nature Conservancy	3,203	819,371	8,169	3,113	21,473
NFWF	1,192	2,260	197	1,914	1,193
NPR	3,195	6,994,481	72,512	3,696	119,223
NY Public Library	3,219	2,022,128	112	3,116	25,940
Operation Blessing	3,211	643,640	3,273	3,529	11,530
PAN Foundation	604	3,647	468	1,879	604
PBS	3,235	2,315,774	104,583	3,431	68,541
Planned Parenthood	3,206	189,169	812	2,041	8,545
Project HOPE	3,226	9,699	1,412	3,091	6,929
Rotary International	3,207	318,376	8,887	3,705	21,669
Salvation Army USA	3,207	55,338	6,748	3,154	46,298
Samaritan's Purse	3,211	806,853	39,883	3,033	15,762
Save the Children US	3,238	2,738,478	4,662	3,383	24,178
Scholarship America	3,205	17,430	786	2,968	3,614
Shriners Hospitals	3,226	18,373	2,520	3,263	9,967
Smithsonian	3,212	2,597,226	215	3,359	17,299
Special Olympics	3,218	92,295	1,352	3,049	20,106

St. Jude	3,245	423,832	777	3,510	7,711
Step Up For Students	1,962	1,842	282	1,353	1,968
Susan G. Komen	3,238	123,561	4,019	3,187	11,763
Teach For America	3,194	148,636	1,451	3,043	23,304
The Alliance	3,242	6,394	601	2,951	5,418
The Carter Center	3,199	41,490	1,661	2,794	6,732
The Joint (JDC)	3,202	12,355	1,864	2,791	4,241
The Kennedy Center	3,227	57,625	924	3,043	16,359
The Met	3,220	3,211,349	1,373	3,139	22,911
The Pew Trusts	3,200	24,287	1,015	3,224	23,024
The Task Force	1,109	1,338	460	2,768	1,109
The Y	3,216	34,164	809	2,193	5,463
Toys for Tots	561	7,089	169	1,376	564
UJA-Federation of NY	3,228	15,869	1,843	2,902	12,041
UNCF	3,217	13,250	2,846	1,642	12,804
United Way	3,197	144,354	5,905	3,169	10,489
VolunteersOfAmerica	3,224	8,059	1,950	2,962	13,879
WCS	3,241	30,434	4,264	2,181	11,149
WGBH	3,220	31,575	5,115	3,139	12,841
WHOI	1,400	7,940	194	1,544	1,401
World Vision USA	3,215	593,525	14,921	3,438	23,884
World Wildlife Fund	3,229	1,126,337	748	3,199	10,949
WWP	3,197	184,744	4,757	2,966	18,959
Young Life	3,183	53,983	2,048	2,994	5,256
YWCA USA	3,233	11,424	1,750	2,984	31,830

APPENDIX B: NONPROFIT TWEET TYPE BY ORGANIZATION

		Retweet	Public Message	Original Content	Total
Alzheimer's Assoc.	Count	590	1921	695	3206
	Percent	18.4%	59.9%	21.7%	100.0%
American Cancer Soc	Count	1034	341	1867	3242
	Percent	31.9%	10.5%	57.6%	100.0%
American Heart Assoc	Count	467	414	2345	3226
	Percent	14.5%	12.8%	72.7%	100.0%
American Kidney Fund	Count	530	96	2602	3228
	Percent	16.4%	3.0%	80.6%	100.0%
American Red Cross	Count	478	660	2069	3207
	Percent	14.9%	20.6%	64.5%	100.0%
AmericanBibleSociety	Count	218	46	2943	3207
	Percent	6.8%	1.4%	91.8%	100.0%
AMNH	Count	250	168	2799	3217
	Percent	7.8%	5.2%	87.0%	100.0%
Art Institute	Count	647	569	2026	3242
	Percent	20.0%	17.6%	62.5%	100.0%
ASPCA	Count	484	803	1912	3199
	Percent	15.1%	25.1%	59.8%	100.0%
BBBS	Count	784	442	2014	3240
	Percent	24.2%	13.6%	62.2%	100.0%
Boy Scouts - BSA	Count	698	168	2244	3110
	Percent	22.4%	5.4%	72.2%	100.0%
Boys & Girls Clubs	Count	1332	158	1708	3198
	Percent	41.7%	4.9%	53.4%	100.0%
Boys Town	Count	769	303	2167	3239
	Percent	23.7%	9.4%	66.9%	100.0%
CARE	Count	916	254	2070	3240
	Percent	28.3%	7.8%	63.9%	100.0%
Catholic Relief	Count	696	354	2199	3249
	Percent	21.4%	10.9%	67.7%	100.0%
Catholic Charities USA	Count	989	47	2187	3223
	Percent	30.7%	1.5%	67.9%	100.0%
CBN News	Count	907	9	2308	3224
	Percent	28.1%	.3%	71.6%	100.0%
Child Fund	Count	192	128	2924	3244
	Percent	5.9%	3.9%	90.1%	100.0%
Clinton Foundation	Count	683	3	2534	3220
	Percent	21.2%	.1%	78.7%	100.0%
CMMB	Count	1047	96	2093	3236
	Percent	32.4%	3.0%	64.7%	100.0%
Communities In Schools	Count	784	31	2416	3231
	Percent	24.3%	1.0%	74.8%	100.0%
Compassion Intl	Count	40	1939	1240	3219
	Percent	1.2%	60.2%	38.5%	100.0%
Conservation Fund	Count	1340	47	1829	3216
	Percent	41.7%	1.5%	56.9%	100.0%
Cross International	Count	261	50	1351	1662
	Percent	15.7%	3.0%	81.3%	100.0%

Cru	Count	129	319	2779	3227
	Percent	4.0%	9.9%	86.1%	100.0%
Dana-Farber	Count	773	95	2329	3197
	Percent	24.2%	3.0%	72.8%	100.0%
Direct Relief	Count	926	435	1858	3219
	Percent	28.8%	13.5%	57.7%	100.0%
Doctors w/o Borders	Count	904	123	2217	3244
	Percent	27.9%	3.8%	68.3%	100.0%
Ducks Unlimited	Count	312	36	2859	3207
	Percent	9.7%	1.1%	89.1%	100.0%
Feed the Children	Count	907	229	2096	3232
	Percent	28.1%	7.1%	64.9%	100.0%
Feeding America	Count	490	799	1928	3217
	Percent	15.2%	24.8%	59.9%	100.0%
Food For The Poor	Count	454	177	2612	3243
	Percent	14.0%	5.5%	80.5%	100.0%
Fred Hutch	Count	1104	74	2058	3236
	Percent	34.1%	2.3%	63.6%	100.0%
Girl Scouts	Count	511	1127	1607	3245
	Percent	15.7%	34.7%	49.5%	100.0%
Good360	Count	767	219	2252	3238
	Percent	23.7%	6.8%	69.5%	100.0%
Goodwill Industries	Count	1207	385	1632	3224
	Percent	37.4%	11.9%	50.6%	100.0%
Habitat for Humanity	Count	293	1898	1049	3240
	Percent	9.0%	58.6%	32.4%	100.0%
HarlemChildren'sZone	Count	864	46	604	1514
	Percent	57.1%	3.0%	39.9%	100.0%
IRC Intl Rescue Comm	Count	843	61	2341	3245
	Percent	26.0%	1.9%	72.1%	100.0%
JDRF	Count	1486	225	1459	3170
	Percent	46.9%	7.1%	46.0%	100.0%
Jewish United Fund	Count	353	59	1504	1916
	Percent	18.4%	3.1%	78.5%	100.0%
Lincoln Center	Count	432	193	2621	3246
	Percent	13.3%	5.9%	80.7%	100.0%
LLS	Count	48	2286	910	3244
	Percent	1.5%	70.5%	28.1%	100.0%
Make-A-Wish America	Count	822	505	1882	3209
	Percent	25.6%	15.7%	58.6%	100.0%
MAP International	Count	468	341	2429	3238
	Percent	14.5%	10.5%	75.0%	100.0%
Mental Health America	Count	677	329	2222	3228
	Percent	21.0%	10.2%	68.8%	100.0%
Mercy Corps	Count	250	387	2581	3218
	Percent	7.8%	12.0%	80.2%	100.0%
Metropolitan Opera	Count	1085	544	1615	3244
	Percent	33.4%	16.8%	49.8%	100.0%
MFAH	Count	645	157	2403	3205
	Percent	20.1%	4.9%	75.0%	100.0%
Museum of Modern Art	Count	966	454	1802	3222
	Percent	30.0%	14.1%	55.9%	100.0%
National Jewish	Count	244	321	2663	3228
	Percent	7.6%	9.9%	82.5%	100.0%
National MS Society	Count	473	768	1992	3233

	Percent	14.6%	23.8%	61.6%	100.0%
Natl Gallery of Art	Count	299	184	2755	3238
	Percent	9.2%	5.7%	85.1%	100.0%
Nature Conservancy	Count	700	279	2224	3203
	Percent	21.9%	8.7%	69.4%	100.0%
NFWF	Count	663	18	511	1192
	Percent	55.6%	1.5%	42.9%	100.0%
NPR	Count	824	28	2343	3195
	Percent	25.8%	.9%	73.3%	100.0%
NY Public Library	Count	54	127	3038	3219
	Percent	1.7%	3.9%	94.4%	100.0%
Operation Blessing	Count	48	104	3059	3211
	Percent	1.5%	3.2%	95.3%	100.0%
PAN Foundation	Count	64	25	515	604
	Percent	10.6%	4.1%	85.3%	100.0%
PBS	Count	1648	168	1419	3235
	Percent	50.9%	5.2%	43.9%	100.0%
Planned Parenthood	Count	1553	211	1442	3206
	Percent	48.4%	6.6%	45.0%	100.0%
Project HOPE	Count	784	157	2285	3226
	Percent	24.3%	4.9%	70.8%	100.0%
Rotary International	Count	929	143	2135	3207
	Percent	29.0%	4.5%	66.6%	100.0%
Salvation Army USA	Count	334	1450	1423	3207
	Percent	10.4%	45.2%	44.4%	100.0%
Samaritan's Purse	Count	640	295	2276	3211
	Percent	19.9%	9.2%	70.9%	100.0%
Save the Children US	Count	949	837	1452	3238
	Percent	29.3%	25.8%	44.8%	100.0%
Scholarship America	Count	609	89	2507	3205
	Percent	19.0%	2.8%	78.2%	100.0%
Shriners Hospitals	Count	1468	136	1622	3226
	Percent	45.5%	4.2%	50.3%	100.0%
Smithsonian	Count	634	966	1612	3212
	Percent	19.7%	30.1%	50.2%	100.0%
Special Olympics	Count	1234	243	1741	3218
	Percent	38.3%	7.6%	54.1%	100.0%
St. Jude	Count	519	1244	1482	3245
	Percent	16.0%	38.3%	45.7%	100.0%
Step Up For Students	Count	1121	54	787	1962
	Percent	57.1%	2.8%	40.1%	100.0%
Susan G. Komen	Count	860	255	2123	3238
	Percent	26.6%	7.9%	65.6%	100.0%
Teach For America	Count	650	738	1806	3194
	Percent	20.4%	23.1%	56.5%	100.0%
The Alliance	Count	360	69	2813	3242
	Percent	11.1%	2.1%	86.8%	100.0%
The Carter Center	Count	1487	71	1641	3199
	Percent	46.5%	2.2%	51.3%	100.0%
The Joint (JDC)	Count	885	145	2172	3202
	Percent	27.6%	4.5%	67.8%	100.0%
The Kennedy Center	Count	1197	121	1909	3227
	Percent	37.1%	3.7%	59.2%	100.0%
The Met	Count	1548	54	1618	3220
	Percent	48.1%	1.7%	50.2%	100.0%

The Pew Trusts	Count	808	7	2385	3200
	Percent	25.3%	.2%	74.5%	100.0%
The Task Force	Count	636	20	453	1109
	Percent	57.3%	1.8%	40.8%	100.0%
The Y	Count	871	73	2272	3216
	Percent	27.1%	2.3%	70.6%	100.0%
Toys for Tots	Count	232	92	237	561
	Percent	41.4%	16.4%	42.2%	100.0%
UJA-Federation of NY	Count	936	160	2132	3228
	Percent	29.0%	5.0%	66.0%	100.0%
UNCF	Count	1545	193	1479	3217
	Percent	48.0%	6.0%	46.0%	100.0%
United Way	Count	1097	208	1892	3197
	Percent	34.3%	6.5%	59.2%	100.0%
Volunteers Of America	Count	1855	362	1007	3224
	Percent	57.5%	11.2%	31.2%	100.0%
WCS	Count	2615	96	530	3241
	Percent	80.7%	3.0%	16.4%	100.0%
WGBH	Count	386	524	2310	3220
	Percent	12.0%	16.3%	71.7%	100.0%
WHOI	Count	650	85	665	1400
	Percent	46.4%	6.1%	47.5%	100.0%
World Vision USA	Count	363	68	2784	3215
	Percent	11.3%	2.1%	86.6%	100.0%
World Wildlife Fund	Count	1449	8	1772	3229
	Percent	44.9%	.2%	54.9%	100.0%
WWP	Count	173	837	2187	3197
	Percent	5.4%	26.2%	68.4%	100.0%
Young Life	Count	1039	1108	1036	3183
	Percent	32.6%	34.8%	32.5%	100.0%
YWCA USA	Count	983	23	2227	3233
	Percent	30.4%	.7%	68.9%	100.0%
TOTAL	Count	72268	33714	182924	288906
	Percent	25.0%	11.7%	63.3%	100.0%

APPENDIX C: NONPROFIT ORGANIZATION MESSAGE CHARACTERISTICS

	Sample tweets	Number Characters		URLS	Photos	Hashtags	User Mentions
	Count	Mean	SD	%	%	%	%
Alzheimer's Assoc.	3206	113.84	26.13	21.27%	7.14%	87.74%	25.64%
American Cancer Soc	3242	122.27	27.02	56.05%	30.32%	66.32%	50.12%
American Heart Assoc	3226	121.44	26.82	65.16%	30.13%	65.62%	23.87%
American Kidney Fund	3228	113.11	26.52	69.86%	23.14%	82.99%	33.36%
American Red Cross	3207	119.16	24.80	57.84%	25.51%	60.74%	29.31%
AmericanBibleSociety	3207	121.39	27.52	74.71%	1.47%	16.74%	7.89%
AMNH	3217	128.89	18.06	87.29%	62.05%	39.88%	20.27%
Art Institute	3242	132.17	20.39	60.02%	42.63%	18.82%	30.51%
ASPCA	3199	108.00	36.14	56.05%	29.26%	56.58%	33.10%
BBBS	3240	112.58	29.71	39.41%	18.27%	54.51%	49.94%
Boy Scouts - BSA	3110	116.48	23.07	46.40%	3.38%	45.47%	41.51%
Boys & Girls Clubs	3198	125.96	25.22	40.53%	28.74%	68.26%	69.07%
Boys Town	3239	119.73	28.23	60.64%	31.74%	41.37%	42.11%
CARE (care.org)	3240	124.92	24.18	49.26%	45.25%	57.38%	39.88%
Catholic Relief	3249	132.82	14.91	69.22%	21.45%	75.35%	41.21%
CatholicCharitiesUSA	3223	119.91	26.44	51.75%	25.72%	35.68%	48.50%
CBN News	3224	109.40	27.71	60.11%	11.17%	36.35%	44.20%
ChildFund	3244	124.97	19.62	66.62%	47.41%	85.73%	20.28%
Clinton Foundation	3220	134.19	13.67	80.16%	21.30%	58.48%	56.77%
CMMB	3236	125.32	23.98	60.63%	16.90%	68.97%	42.00%
CommunitiesInSchools	3231	124.65	23.06	56.05%	23.49%	66.67%	53.14%
Compassion Intl	3219	107.42	27.07	35.94%	2.24%	23.45%	12.61%
Conservation Fund	3216	129.69	20.23	60.35%	21.24%	52.99%	69.50%
Cross International	1662	112.06	30.44	23.71%	4.93%	34.30%	29.18%
Cru	3227	108.21	32.01	31.14%	15.56%	42.11%	8.37%
Dana-Farber	3197	127.13	20.06	79.67%	28.46%	45.01%	39.54%
Direct Relief	3219	114.30	31.24	61.70%	7.67%	38.49%	60.33%
Doctors w/o Borders	3244	132.31	17.38	68.62%	18.40%	54.07%	44.02%
Ducks Unlimited	3207	126.06	15.35	90.96%	38.38%	79.30%	21.86%
Feed the Children	3232	119.82	30.02	51.95%	39.48%	49.29%	46.66%
Feeding America	3217	125.47	19.95	70.00%	20.42%	59.06%	53.37%
Food For The Poor	3243	116.43	30.69	49.55%	30.65%	37.74%	59.61%
Fred Hutch	3236	125.69	22.77	63.88%	11.37%	63.38%	70.27%
Girl Scouts	3245	112.31	30.56	59.08%	32.51%	25.58%	28.75%
Good360	3238	125.43	21.75	63.28%	31.93%	66.71%	56.49%

Goodwill Industries	3224	122.59	25.23	62.22%	27.98%	51.09%	49.91%
Habitat for Humanity	3240	84.06	41.78	29.97%	13.92%	31.27%	19.81%
HarlemChildren'sZone	1514	132.76	20.06	26.02%	18.36%	69.35%	73.71%
IRC Intl Rescue Comm	3245	130.57	21.14	75.13%	13.34%	41.73%	51.40%
JDRF	3170	120.26	25.73	55.84%	15.21%	71.51%	74.73%
Jewish United Fund	1916	113.85	29.32	54.80%	3.18%	27.92%	33.66%
Lincoln Center	3246	127.41	22.46	72.74%	25.69%	52.40%	70.70%
LLSusa	3244	96.75	33.18	23.80%	12.42%	67.51%	10.67%
Make-A-Wish America	3209	109.83	29.76	65.69%	10.69%	53.76%	53.51%
MAP International	3238	114.38	30.53	48.21%	24.49%	56.02%	32.80%
MentalHealthAmerica	3228	119.62	28.08	45.23%	25.50%	74.63%	43.12%
Mercy Corps	3218	120.97	31.39	72.68%	21.91%	66.19%	29.33%
Metropolitan Opera	3244	117.34	31.19	52.44%	20.13%	37.15%	52.84%
MFAH	3205	129.26	20.38	74.41%	55.38%	53.14%	36.76%
Museum of Modern Art	3222	127.54	24.67	69.27%	42.71%	39.26%	51.64%
National Jewish	3228	117.97	29.08	80.08%	13.14%	80.17%	24.97%
National MS Society	3233	113.54	30.74	55.27%	7.73%	67.09%	27.19%
Natl Gallery of Art	3238	132.47	16.40	44.56%	53.80%	67.57%	18.87%
Nature Conservancy	3203	125.47	22.84	82.67%	40.93%	31.06%	39.18%
NFWF	1192	129.60	19.81	63.51%	18.04%	44.30%	71.14%
NPR	3195	125.07	21.70	76.09%	4.51%	5.92%	29.98%
NY Public Library	3219	119.09	18.06	98.48%	65.61%	23.80%	10.90%
Operation Blessing	3211	119.37	27.62	64.56%	30.33%	66.15%	17.16%
PAN Foundation	604	125.76	22.40	57.78%	16.56%	51.82%	42.05%
PBS	3235	122.38	24.99	54.74%	11.10%	62.19%	83.93%
Planned Parenthood	3206	121.81	28.35	43.70%	12.10%	57.83%	56.92%
Project HOPE	3226	121.17	25.26	64.82%	32.58%	68.60%	41.91%
Rotary International	3207	127.92	19.33	66.64%	24.04%	65.36%	45.68%
Salvation Army USA	3207	120.70	25.76	52.67%	13.07%	34.02%	24.88%
Samaritan's Purse	3211	122.97	20.79	66.55%	13.83%	58.08%	34.54%
Save the Children US	3238	124.29	22.70	65.53%	7.01%	48.80%	43.55%
Scholarship America	3205	131.23	15.23	81.93%	9.11%	35.35%	57.94%
Shriners Hospitals	3226	119.64	30.39	52.20%	27.22%	51.70%	71.54%
Smithsonian	3212	122.90	27.36	58.06%	25.19%	41.69%	55.76%
Special Olympics	3218	123.99	29.04	36.17%	31.20%	56.09%	70.45%
St. Jude	3245	111.42	32.96	36.80%	22.87%	30.97%	32.08%
Step Up For Students	1962	128.08	20.59	50.76%	13.35%	61.06%	65.44%
Susan G. Komen	3238	123.40	26.68	40.74%	25.94%	69.89%	47.59%
Teach For America	3194	112.91	36.16	51.31%	15.97%	33.16%	41.58%
The Alliance	3242	116.00	30.60	58.57%	17.98%	43.46%	16.13%

The Carter Center	3199	121.32	27.91	42.73%	19.38%	70.30%	68.77%
The Joint (JDC)	3202	121.57	27.21	63.62%	22.17%	40.38%	59.71%
The Kennedy Center	3227	127.12	22.37	50.05%	36.63%	59.41%	67.46%
The Met	3220	132.37	17.15	63.60%	32.98%	49.13%	58.98%
The Pew Trusts	3200	130.14	13.78	89.63%	19.25%	28.69%	41.56%
The Task Force	1109	129.14	19.99	47.88%	12.98%	70.42%	79.35%
The Y	3216	119.93	26.40	44.75%	20.74%	86.29%	40.58%
Toys for Tots	561	117.64	33.78	35.29%	17.65%	41.18%	57.40%
UJA-Federation of NY	3228	115.82	34.38	46.81%	27.97%	61.65%	45.07%
UNCF	3217	127.10	25.25	51.57%	13.43%	65.84%	67.11%
United Way	3197	129.36	22.37	59.37%	24.02%	62.12%	63.90%
VolunteersOfAmerica	3224	120.24	30.33	44.70%	21.77%	47.27%	64.92%
WCS	3241	134.46	19.78	61.86%	18.42%	70.93%	86.52%
WGBH	3220	120.62	26.23	71.71%	10.59%	27.55%	57.08%
WHOI	1400	122.83	26.14	56.07%	28.50%	70.64%	64.43%
World Vision USA	3215	134.18	14.92	59.91%	39.41%	57.54%	28.71%
World Wildlife Fund	3229	121.42	23.34	65.47%	21.93%	54.51%	61.78%
WWP	3197	115.72	32.66	64.90%	44.14%	40.04%	32.16%
Young Life	3183	83.35	44.34	13.85%	30.38%	17.75%	42.38%
YWCA USA	3233	124.09	26.21	62.88%	5.82%	59.67%	41.39%

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